

DAWN Medical Examiner Reference Guide

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Contents

Click on the topic you wish to display



I. Introduction	3
1.1 Overview of DAWN	3
1.2 How DAWN Works	∠
1.3 The DAWN ME/C Reporter	
1.4 Privacy Protection	
1.5 Standards and Ethics	5
1.6 Assuring Confidentiality	5
1.7 Truth in DAWN Reporting	<i>(</i>
1.8 Westat and DAWN	6
1.9 About the ME Reference Guide	<i>.</i>
2. How to Identify DAWN Cases	5
2.1 Obtain a List of Deaths	
2.2 Review Records for Decedents	
2.3 Determine if a Death is a DAWN Case	
2.3.1 DAWN Case Criteria	
2.3.2 Evidence in the Record	
2.3.3 Interpretation of Evidence in the Record	10
2.3.4 Deaths Not Reportable to DAWN	
3. The Record Tracking System	13
3.1 Tracking Records: An Example	
3.2 The Confidentiality of Tracking Lists	
4. Getting Started	15
4.1 How to Display eMERS	
4.2 How to Log In	
4.3 Timed Log Outs	
4.4 About the Screens	
4.5 A Note to State Medical Examiners Only	
y	

5.	The Medical Examiner Case Form	19
	5.1 An Overview	19
	5.2 How to Enter a Case	19
	5.3 How to Use Check Boxes	20
	5.4 How to Use Radio Buttons	20
	5.5 How to Complete the Fields	20
	5.6 How to Submit the Form	35
	5.6.1 About Potential Errors Regarding Drug Entries	36
	5.6.2 About Potential Duplicate Case Entries	40
6.	How to Modify or Delete an Incomplete Case	42
	6.1 How to Modify a Case	43
	6.2 How to Delete a Case	44
7.	How to View Case Counts	46
8.	How to Enter and Update the Medical Examiner Activity Report	47
	8.1 How to Display the Activity Report	47
	8.2 About the Activity Report Screen	47
	8.3 How to Review Previously Recorded Activity for a Specific Month	52
9.	How to Log Out	54

Appendix A: Common Abbreviations

Appendix B: Glossary of DAWN Terms

Appendix: C: Non-Pharmaceutical Inhalants

Appendix: D: Decision Tree

1. Introduction

1.1 Overview of DAWN

DAWN is a public health surveillance system that monitors national and local trends in drug-related emergency department visits and drug-related deaths investigated by medical examiners and coroners. DAWN tells us where new drug problems are emerging, how old drug problems are changing, where public health resources might be needed, and which drugs and drug combinations are associated with the most severe health consequences.

DAWN is the responsibility of the Substance Abuse and Mental Health Services Administration (SAMHSA) of the U.S. Department of Health and Human Services (DHHS). SAMHSA is required to collect DAWN data by Section 505 of the Public Health Service Act (42 U.S.C. 290aa-4). SAMHSA has contracted with Westat, a private research firm in Rockville, Maryland, to operate the DAWN data collection system.

DAWN data are collected regularly from two primary sources within the U.S.: Emergency Departments (EDs) and medical examiners and coroners (ME/Cs).

Emergency Departments (EDs): DAWN collects data on drug-related ED visits from a scientific sample of hospitals. These hospitals are selected to represent all hospitals in 22 major metropolitan areas and in the U.S. as a whole. The sample includes large and small hospitals, urban as well as rural and suburban hospitals. Only non-Federal, short-stay, general medical and surgical hospitals that operate 7-day/24-hour EDs are eligible to participate in DAWN. In the next five years the DAWN sample will be expanding. Once the expansion is complete, approximately 900 hospitals will be participating in DAWN.

Medical Examiners and Coroners (ME/Cs): DAWN collects data on drug-related deaths reviewed by ME/Cs. DAWN does not use a statistical sample of ME/C jurisdictions (counties). Priority is given to jurisdictions within the metropolitan areas represented in the ED component of DAWN, but a number of ME/C jurisdictions outside of those metropolitan also participate. The ME/C component of DAWN will be expanding in tandem with the ED expansion. DAWN is interested in deaths reviewed by medical examiners, coroners, and other officials responsible for death investigations. Generally speaking, a medical examiner is a physician who practices forensic medicine. A coroner may be a physician or a lay person who, typically, is not trained in forensic medicine. The type of official responsible for death investigations varies across jurisdictions. Some of these officials are appointed; some are elected. In the U.S., 22 states and the District of Columbia investigate deaths using state, district, or county medical examiners; 18 states use both medical examiners and coroners; and 11 states use only coroners. Death investigation jurisdictions are eligible for DAWN, regardless of the type of official involved.

Not all deaths are reviewed or investigated by ME/Cs, and the rules that specify which deaths are referred to ME/Cs also vary by state and jurisdiction. Typically, deaths that are attributed to natural disease processes are not referred to the ME/C; in those cases, the decedent's treating or attending physician completes the death certificate. However, deaths not due to a natural process – such as homicides, suicides, or accidents – or unattended deaths or deaths that occur under certain other circumstances (such as those involving an unidentified person) usually are

investigated by the ME/C for the area in which the death occurred. This variability in the types of deaths investigated by ME/Cs affects the cases that are available for consideration by DAWN, but in general, we believe that most deaths of interest to DAWN will be referred to ME/Cs in most jurisdictions.

Finally, the content of the death investigations may vary. Typically, the ME/C evaluates the medical history of the decedent, if known; performs an external physical examination; obtains body fluids for toxicologic testing; and investigates the circumstances of the death to determine cause and manner or death. Some cases also require a medicolegal autopsy (postmortem examination) to determine cause or manner of death. Other investigations to determine cause of death may involve fewer steps and processes.

1.2 How DAWN Works

Recognizing the importance of DAWN data to the community and the Nation, hundreds of ME and ME/C facilities participate in DAWN. Each participating facility is assigned a DAWN Reporter to collect data on the facility's behalf. Some facilities appoint a member of their own staff to report DAWN cases; other facilities work with Westat to appoint a Field Reporter (WFR).

The DAWN Reporter reviews decedent records, identifies DAWN cases, and abstracts demographic and substance use information. Decedents are **never** interviewed. For each DAWN case, the DAWN Reporter enters the information on the DAWN computer application, Electronic Medical Examiners Reporting System (eMERS) and submits the data electronically.

The DAWN Facility Liaisons (FLs), Westat's representatives in the field, visit participating facilities on a regular basis. These visits are to coordinate DAWN activities with facility administration staff, train Reporters, evaluate data collection procedures, and solve reporting problems as needed.

The FLs and other Westat staff also conduct periodic field audits to verify that reporting criteria are fully understood and consistently used. To be a true "warning network," DAWN must collect data in a timely manner and the reporting must be complete and consistent across all participating ME/Cs. To achieve these goals, Westat has developed quality control procedures associated with identifying, tracking, entering, and transmitting DAWN data.

1.3 The DAWN ME/C Reporter

As a DAWN ME/C Reporter, you are responsible for gathering and recording DAWN data and transmitting these data to Westat. You rely the on information in decedent records. It is your responsibility to:

- *Review records* for each death reviewed by the ME/C and *identify DAWN cases* accurately and consistently, based on the information contained in the record.
- *Track ME/C records* reviewed and not yet reviewed.
- Enter information from the decedent record accurately and completely on the electronic DAWN *ME Case Form*.
- Complete and submit to Westat the *ME Activity Report Form* which documents the number of deaths reviewed and DAWN cases submitted for each month.

1.4 Privacy Protection

Once DAWN data are disclosed to SAMHSA, the data are protected under a different Federal law, Section 501(n) of the Public Health Service Act. Section 501(n) says that identifiable data can be used only for the purpose for which they are collected. Furthermore, Title V of the E-Government Act of 2002 (Pub. L. 107-347) imposes stiff penalties—up to 5 years in prison and fines of up to \$250,000—for unlawful disclosures of information by SAMHSA and its sworn agents (e.g., contractors). Since DAWN collects data for public health surveillance, identifiable data cannot be used for any other purpose. DAWN collects no direct identifiers, and indirect identifiers (such as age, sex, and race) are used only in aggregate statistics.

1.5 Standards and Ethics

Reporters, as well as all DAWN project staff, must follow a code of standards and ethics in performing work on DAWN. The code is set by DHHS. SAMHSA, as an agency of DHHS, and Westat, as the DAWN contractor for SAMHSA, must abide by these standards and insure that findings released are an accurate portrayal of the ME/C records reviewed. All DAWN staff agree to these standards when they sign confidentiality agreements and reporter agreements.

Key elements of the code of standards and ethics in DAWN include:

- Assuring confidentiality of information accessed in DAWN
- Accurately reporting on DAWN to insure that findings released are an accurate portrayal of the ME/C records reviewed.

1.6 Assuring Confidentiality

It is your duty as a DAWN Reporter to keep the promise of confidentiality of DAWN data. During the course of reporting for DAWN, you will be given access to sensitive decedent information for the purpose of identifying and reporting DAWN cases.

As a DAWN Reporter, you:

- **Do not** collect direct decedent identifiers (for example, decedent names, addresses, Social Security Numbers, etc.) and do not transmit such identifiers in any form to Westat.
- **Do not** reveal to unauthorized individuals the identity of any person, health care provider, or other organization represented in the confidential data.
- **Do not** disclose to unauthorized individuals any identification codes or passwords that Westat provided to you for reporting DAWN data.
- **Do not** remove decedent records from the ME/C's designated site for any purpose associated with DAWN data collection.
- **Do not** use the data collected for DAWN for any other purpose.
- **Do not** use decedent information in a manner or place that violates the administrative, technical, or physical security requirements of the ME/C facility.
- **Do not** take home or send to Westat copies of ME/C logs or tracking lists.

When serving as a DAWN Reporter, remember:

- Inadvertent or casual disclosure of information violates the confidentiality protections just as seriously as deliberate disclosure.
- Once an individual's privacy has been violated, it cannot be undone.
- Nondisclosure applies to all forms of communication—spoken, written, and electronic.

1.7 Truth in DAWN Reporting

As a DAWN Reporter, you must:

- Perform work in a faithful, industrious and professional manner
- Perform "authentic" work, i.e., conduct work following DAWN protocol and procedures
- Understand that it is unethical and fraudulent to submit work that has not been collected as represented
- Recognize that any violation of the above may lead to further actions by Westat, including withholding of payments, dismissal, court action, and claims for monetary damages.

1.8 Westat and DAWN

In February 2002, Westat was awarded the DAWN Operations Contract (DOC) by SAMHSA. Under this contract, Westat is responsible for the DAWN data collection and for implementing the redesign of DAWN to convert it into an active surveillance system capable of capturing information and rapidly turning it back to users.

Westat is an employee-owned research corporation serving agencies of the U.S. Government, as well as businesses, foundations, and state and local governments. Westat's research, technical, and administrative staff of more than 1,500 is located at the company's headquarters in Rockville, Maryland, near Washington, DC. An additional 1,100 staff members are engaged in data collection and processing at Westat's survey processing facilities, at the Telephone Research Center facilities, and throughout nationwide field interviewing operations. Demonstrating technical and managerial excellence since 1961, Westat has emerged as one of the most respected contract research organizations in the U.S.

1.9 About the ME Reference Guide

This guide describes the functions and other features of the eMERS application. eMERS enables you to perform the following activities:

- Enter new cases;
- Modify or delete cases;
- View case counts: and
- Enter and update activity reports.

This manual contains instructions on how to perform these activities. Appendix D at the back of the manual contains a Decision Tree that can facilitate data entry throughout the reporting process.

The manual is organized as follows:

- Section 2 explains how to identify DAWN Cases.
- Section 3 explains how to track records and avoid duplicate entries.
- Section 4 explains how to log in and offers some general descriptions of the screens.
- Section 5 explains how to complete the Medical Examiners Case Form.
- Section 6 explains how to modify or delete an incomplete case.
- Section 7 explains how to view case counts.
- Section 8 explains how to enter and update the Medical Examiners Activity Report.
- Section 9 explains how to log out of the system.

In addition, the following Appendices containing reference material, appear in the back of the manual:

- Appendix A contains some of the common abbreviations used in records.
- Appendix B contains a glossary of DAWN terms.
- Appendix C contains a list of non-pharmaceutical inhalants.
- Appendix D contains the DAWN Decision Tree, an easy-to-follow record offering step-bystep instructions on how to identify DAWN cases.

2. How to Identify DAWN Cases

The criteria for identifying DAWN cases are very simple and general. A death is a DAWN case if the death was induced by or related to the decedent's ingestion or use of a drug. This is based upon the documentation in the decedent's record.

The DAWN protocol for identifying DAWN cases requires the following steps:

- Step 1: Obtain/develop a list of all deaths for the ME/C participating jurisdiction.
- Step 2: Directly review the decedent records for each death on the list
- Step 3: Identify DAWN cases
- Step 4: Keep track of the records that have been reviewed and the records that still need to be reviewed.

This chapter provides the basic guideline for each of these four steps.

2.1 Obtain a List of Deaths

You need to generate a clean list for all deaths for each jurisdiction you report to DAWN. This list may be handwritten or computerized. Either develop a list for your purposes, or copy or print out an existing list. You will use this list to count the deaths for your jurisdiction each month and it will be the basis for the tracking list discussed in Chapter 3.

The log may have some minimal identifying information, such as decedent name or record number, necessary to locate the records or to look-up those records on a computerized system.

Ultimately, you need to compile a list of all deaths for each reporting jurisdiction.

Reminder: Since the list may contain decedent identifying information, you must store these lists in a secure location and keep them at least two months for quality assurance reviews.

2.2 Review Decedent Records

The DAWN protocol requires that all reporters use the "Direct Record Review" procedure to identify DAWN cases.

Direct Record Review (DRR) refers to determining whether a death is a DAWN case, by reviewing the information in the decedent's record and applying the DAWN case criteria.

It does not matter whether your jurisdiction uses paper or electronic records, as long as you review a record for each decedent on the log or census.

When the DAWN data collection is established in a new facility, the DAWN Facility Liaison works with ME/C Staff and the DAWN Reporter to design a system whereby records are available to DAWN Reporters in a timely manner. If you encounter any problems in accessing records work with your Facility Liaison to resolve them.

Reviewing a record for each decedent is important because each death is potentially a DAWN case. Short-cut methods to reduce the number of records reviewed have been proven to be unsatisfactory because they miss DAWN cases.

As a DAWN Reporter, your objective is to locate and review all available decedent records to determine which deaths are DAWN cases. Although, your goal is to review **every** record, in some instances that goal may not be immediately achievable, even with your best efforts and the involvement of your DAWN Facility Liaison. For this and other reasons, you **must enter** the information on the Activity Report (see Chapter 7, How to Complete the Medical Examiner Activity Report). Westat needs to know how many deaths (Total ME Deaths) and how many of the records you were able to obtain and actually review **every time** you report.

2.3 Determine if a Death is a DAWN Case

Determining if a death is a DAWN case requires you to understand:

- DAWN case criteria
- Evidence in the decedent record that can be use for identifying DAWN cases
- Interpretation of the evidence in the record
- Exceptions

2.3.1 DAWN Case Criteria

The DAWN Case Criteria states:

A death is a DAWN case if the death was induced by or related to the decedent's ingestion or use of a drug.

Most problems related to identifying DAWN cases will consist of questions about how to apply the DAWN case criteria to specific deaths. When you have any questions about how to apply the DAWN case criteria, call your DAWN Regional Monitor in the Westat Home Office at 1-800-FYI-DAWN.

2.3.2 Evidence in the Record

To identify a DAWN case, the DAWN Reporter must find and evaluate the evidence documented in the decedent's record. The DAWN case criteria require that the death be druginduced or drug-related. **Drug use must be implicated in the decedent's death as the primary cause for the death (drug-induced) or as a factor that contributed to the death (drug-related).** The relationship between the drug use and the death must be supported by the evidence in the record, whether the drug-use is confirmed or presumed.

The evidence that the drug use is involved in the person's death may come from seven sources:

- Death Certificate (usually contains Cause of Death and Manner of Death)
- Toxicology lab report
- Autopsy report
- Documentation on External physical signs
- Documentation on the Inspection of scene of death
- Statement of physician/family/friends

• Other information

If the death certificate or autopsy report implicates the drug use in the death, it is a DAWN case with few exceptions. For the other sources, the drug use should be noted in more than one source, this is especially important when the drug use is **not** noted on the Death Certificate. Do not make assumptions. It is important to remember that a death where **only** the toxicology report indicates recent drug use is not a DAWN case. A toxicology report can be used as supporting evidence only.

DAWN cases include the use, misuse and abuse of drugs. The key is whether the drug use is implicated and documented as a <u>cause</u> or <u>contributing factor to the death</u>.

- "**Drug-induced**" means that the person's death was directly caused by the drug(s). In other words, the drug use was the primary cause of death. These cases may include overdoses, poisonings, adverse reactions, or allergic reactions.
- "Drug-related" means that the drug(s) contributed to the person's death, but did not directly cause it. These cases may include deaths stemming from accidents or injuries resulting from drug use. For drug-related deaths, the relationship of the drug to the death may be presumed or confirmed, but it must be supported by the documentation in the record.

2.3.3 Interpretation of Evidence in the Record

Different ME/Cs may use different terms to describe the sections and contents of their records. The terms used by DAWN – Death Certificate, Toxicology lab report, autopsy report, External physical signs, Inspection of scene of death, Statements – describe the types of categories of information. These categories may be found under other names in the records you review.

As a DAWN Reporter, one of your tasks is to become familiar with the terminology, content, and layout of the records for the information that you need to identify DAWN cases and extract DAWN data items. You need to review all the relevant sections of the record, even if the information is not conveniently consolidated in one place.

2.3.4 Deaths Not Reportable to DAWN

This section extends the basic DAWN criteria to specific situations, questions, and problems that may arise in the course of reviewing records to identify DAWN cases. There are eight basic reasons for a death not being a DAWN case. Explanations of each of these, with examples, are provided to help reporters understand particular circumstances that do not qualify as DAWN cases. For clarification, several of these also include examples of a similar death that actually is a DAWN case, with an explanation why one is and one is not a DAWN case.

Example #1

The decedent was a recent drug user, but died of natural causes – If the drug did not cause or contribute to the death, it is **not** a DAWN case. Examples would include a cocaine user who dies of cancer, a heroin user who dies from multiple sclerosis, or a marijuana user who dies of complications from diabetes.

Example #2

The decedent was a homicide victim who was on drugs at the time of his/her death –

Whether the victim of the homicide was taking drugs is not the relevant issue. If the weapon in the homicide was a drug, the death is a DAWN case because the drug caused the death. Homicides by other means are not DAWN cases, even if the victim was using drugs that contributed to violent behavior. Examples would include a person on PCP who is killed in a shooting or a marijuana user who is stabbed in a fight.

Example #3

A non-pharmaceutical substance was consumed but not inhaled – The non-pharmaceutical substance (e.g., gasoline, toluene, paint, glue) was consumed or administered by some means other than inhalation, such as swallowing or injection. The rule for non-pharmaceuticals is simple. DAWN is interested in non-pharmaceuticals that are used as inhalants. Therefore, a non-pharmaceutical is reportable only if inhaled.

The decedent drank turpentine. This is **not** a DAWN case.

The decedent injected gasoline while high on PCP. This **is** a DAWN case, only because of the PCP; only the PCP is reportable.

The decedent became disoriented, passed out, and died as a result of inhaling paint fumes while painting a closet. This is a DAWN case because the paint was inhaled

Example #4

Only a history of drug abuse is documented – Such documentation may appear in the record as a notation indicating "history of drug abuse." If documentation points only to a history of drug use/abuse and there is no evidence of recent use, it is **not** a DAWN case.

The record of a decedent who was HIV+ indicates a history of intravenous drug abuse (IVDA). This is not a DAWN case because of the HIV+ status or because of the intravenous drug abuse. To be a DAWN case, there must be evidence of recent drug use that caused or contributed to the death.

Example #5

Alcohol was the only substance involved and the decedent was age 21 or over – Deaths involving alcohol and no other substance are DAWN cases only if the decedent is not an adult (age less than 21). Alcohol is reportable in an adult DAWN case only when present in combination with another reportable substance.

Example #6

The only documentation of drug use is in toxicology test results – Documentation of drug use must be present in the record, on the death certificate, or autopsy. Toxicology may pick up recent medications taken for legitimate therapeutic purposes, drugs administered during life-saving treatment, or drugs taken some time ago and unrelated to the death. Therefore, toxicology alone is not sufficient evidence to make a death a DAWN case. For example:

- A man slipped on a wet concrete floor and fractured his hip. He subsequently died from a pulmonary embolus. The toxicology result is positive for opiates. There is no other evidence of opiate use in the record, death certificate or autopsy. This is **not** a DAWN case.
- An unidentified man is found unconscious and later dies. Toxicology is positive for benzodiazepines. The cause of death states "suicide, + benzos." This **is** a DAWN case because "+ benzos" is included. This is evidence that the use of benzodiazepines is related to the person's death.

Example #7

Drugs listed are not related to the death – There is no documentation in the record, death certificate, or autopsy to indicate that the death was related to the use of drugs. For example:

- A 24-year-old female passenger in a bus accident died from her injuries. She had been taking cocaine just before the bus was sideswiped by a tractor-trailer. There is no indication in the record that her cocaine use was connected to the injury. This is **not** a DAWN case.
- A young man presented with fever, headache, and symptoms of meningitis. He later dies. The record indicates that he used an albuterol inhaler and took oral steroids for asthma. These medications are not related to the person's death. This is **not** a DAWN case.

Example #8

There is no evidence of drug use – The record, death certificate or autopsy does not refer to drug use. Examples may include:

Undermedication – Decedent who forgot to take, stopped taking, or took too little of a prescribed medication. For example, the decedent stopped taking medication to control high blood pressure, suffered a stroke, and died. The stroke is related to not taking the medication. This is **not** a DAWN case.

3. The Record Tracking System

The most dependable way to ensure that you have reviewed every record is to use a tracking system. DAWN Reporters must have a method to track which records have been reviewed and which records have yet to be reviewed.

- At a minimum your record tracking system should include a way to:
- Identify all deaths for your jurisdiction for each month (as described in Section 2.1).
- Record a link so you have a way of linking the death to the record, in the event the DAWN
 Home Office has questions about a specific DAWN case or there is a need to review that
 record again for other DAWN-related quality assurance activities.
- Track each record that you review, as well as those that still need to be reviewed.

The following guidelines will help you set up and use a tracking system to perform the other activities related to locating and reviewing records. These guidelines are general, and the specific method will be different in each ME/C Office. Your DAWN Facility Liaison will work closely with you to develop the best approach for your specific situation.

3.1 Tracking Records: An Example

Name	Date of Death	Rec#	Record Obtained	Record Reviewed	Notes
Joe Smith	11/01/2004	A20041130	X	MKS	
Jane Jones	11/01/2004	A20041131	X	MKS	
Rose Roe	11/01/2004	A20041132	X	MKS	11/15/04 Tox test not returned yet. Entered incomplete.
Cid Byrd	11/02/2004	A20041133	X	MKS	
Jim Wood	11/02/2004	A20041134	X	MKS	File incomplete, need to review again later

Figure 1a Sample Tracking List

Step 1: Mark off on the tracking list each record obtained and reviewed

After obtaining each record (paper or electronic), it is important to identify each record that you reviewed. You could identify the records obtained and reviewed via the columns shown in Figure 1a above, or you could mark each record off as reviewed by highlighting them and initialing them. Cross off any duplicate records and identify them as "DUP".

Review this list on a regular basis to identify those records that are still outstanding, and try to locate them. Except for records that are mislaid or required by special circumstances to be kept out of circulation for an extended period, it is likely that the records that were initially unavailable will become available after a short time.

Step 2: Mark Cases Entered into eMERS but saved as Incomplete

Sometimes you will identify cases as DAWN Cases, or you will be fairly certain they are DAWN Cases, and these cases will be missing a few items of information from the record. For example, the Death Certificate has not been finalized, or you are still waiting for the toxicology report. Enter these cases into eMERS along with the available information, and save the cases as "Incomplete." Be sure to mark them as "Entered Incomplete" to remind yourself to check the record again. When you have the additional information you need, enter it on the case form and save the case as "Complete."

Step 3: Continue pursuing records that appear on the list but you have not yet reviewed.

Continue to use the tracking list to help you obtain and review all, or as many as possible, of the needed records. Identify with an "M" (missing) any records that you consider permanently lost. When each record on the list has been accounted for – obtained or determined to be permanently unavailable – and each record has been reviewed, you know that DAWN reporting for the deaths covered by the list has been completed.

3.2 The Confidentiality of Tracking Lists

Tracking lists may contain confidential information about individual decedents. Keep your tracking list in a secure locked place, preferably a locked cabinet or in a room that is kept locked when not occupied.

It is a breach of DAWN confidentiality protocol to remove records from the ME/C facility. The same is true for tracking lists. Do not remove the tracking lists from the ME/C facility; these lists may contain identifying information about decedents.

You will need to keep a copy of the tracking list for at least two months so that Westat staff can make use of it for quality assurance purposes. When the tracking list is no longer needed, you should shred your copies or turn them over to the appropriate ME/C facility manager, as required. Most facilities have security shredding.

4. Getting Started

The DAWN Electronic Medical Examiners Reporting System (eMERS) is an interactive webbased system providing Medical Examiners (MEs) with an automated means of capturing and reporting DAWN data. This guide describes the functions and other features of the eMERS application.

eMERS enables you to perform the following activities:

- Enter new cases;
- Modify or delete cases;
- View case counts; and
- Enter and update activity reports.

4.1 How to Display eMERS

The system can be displayed using any web browser, but this guide is written assuming you are using either Internet Explorer (IE) version 5.01 or higher, or Mozilla-based browsers such as Netscape 7, Firefox, and Safari. Other browsers can be used to access eMERS, however, they may operate differently when using some eMERS functions. Please notify the DAWN Help Desk at 1-800-FYI – DAWN (1-800-394-3296), if you use a browser other than Internet Explorer or a Mozilla-based browser. You will then receive directions for entering "test" data to determine if your browser is compatible for use with eMERS.

To display eMERS, use the following procedure:

- 1. Type https://entry.e-dawn.net/ into the Address (IE) or Location (Mozilla) field.
- 2. Press the Enter key.

The eMERS Log In screen will then be displayed on your screen (see Figure 4-1).



Figure 4-1 The eMERS Log In Screen

Within your web browser, you can create a "Favorite" (IE) or "Bookmark" (Mozilla) to facilitate access to the DAWN eMERS web site. After establishing the Favorite or Bookmark, you can then create a shortcut to access the site directly from your desktop.

4.2 How to Log In

Only authorized ME reporters may use eMERS. A user account tied to a unique User ID and password combination grants you access to view, add, modify and delete DAWN records. For additional security, the information transferred from your computer is encrypted so that it cannot be read, in the unlikely event it is intercepted by an electronic intruder.

You have been assigned a User ID and a personal password. **This information is confidential** and should not be left on your desk or in any other public area. You must type both of these into the Log In Screen to gain access to eMERS. When you type in the User ID during the Log In process, the text will appear in the appropriate field on the screen. For security purposes, the text of the *password* entry is *not* displayed. If you forget or misplace this information, call 1-800-FYI-DAWN (1-800-394-3296) for assistance.

To Log in to eMERS (see Figure 4-1):

- 1. Place the cursor in the **User ID** field with the mouse or by pressing the Tab key.
- 2. Type in your User ID.
- 3. Place the cursor in the **Password** field with the mouse, or by pressing the **Tab** key.
- 4. Type in your personal Password.

After logging in, you will automatically have access to the eMERS account of the ME for which you are responsible.

When you have completed the Log In process successfully, the **eMERS Home** page will be displayed (see Figure 4-2).

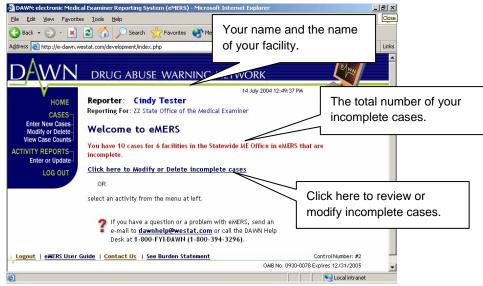
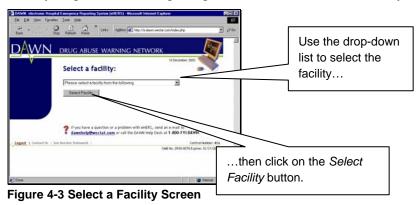


Figure 4-2 The eMERS Home Page

The current date, name of the Reporter (your name), and the Medical Examiner's Office for which you are reporting are displayed at the top of the screen, along with the number of your incomplete cases, if any.

The number of *incomplete* cases is displayed because one of the primary purposes of eMERS is to remind you to complete case records. Incomplete cases are those that you still need to work on before submitting them. Displaying this number reminds you that you still have incomplete cases.

You may be assigned to report for more than one facility. If this is the case, after logging in, a screen will be displayed containing a drop-down list from which to select the specific facility for which you are reporting at that particular time (see Figure 4-3). To report cases for another facility, log out. Then, log in again, and select the new facility for which you wish to report.



4.3 Timed Log Outs

For security reasons, always log off before you step away from your computer. If you leave eMERS displayed on your computer for more than an hour without performing any activity, the system will automatically log you out and return you to the Log In screen. If you have not saved your work, it will be lost.

4.4 About the Screens

While different screens in eMERS contain distinct fields, there are some characteristics that are common throughout every screen in the application.

After you log in, a menu in the left-hand corner of every screen in the application enables you to perform each of the activities contained in eMERS (see Figure 4-4).

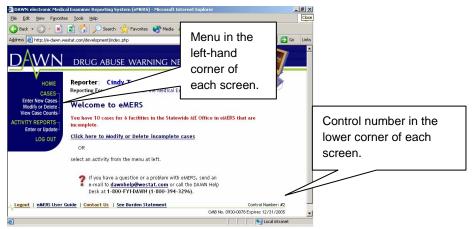


Figure 4-4 Menu in the Left-hand Corner of Each Screen

The lower right-hand corner of each screen contains a control number (see Figure 4-5). Should you need to call the DAWN Help Desk for assistance, refer to this number to identify the specific screen in which you are working.

4.5 A Note to State Medical Examiners Only

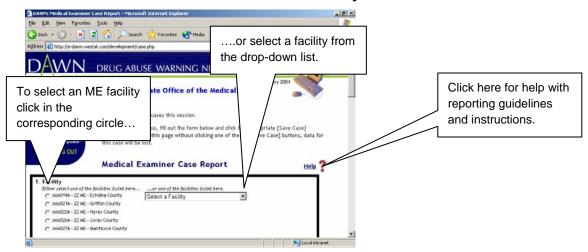


Figure 4-5 Medical Examiner Case Report (Upper Portion)

Prior to entering information, State Medical Examiners will be typically asked to select the county in which the ME facility resides for which the information pertains. For example, before entering information in a Case Report, State Medical Examiners will be asked to select the county to which the information corresponds.

To do this, click in the circle next to the county you wish to select, or select the facility from the drop-down list provided (see Figure 4-5). After you finish entering information, for example, in the Case Report Screen you may then select another facility without leaving the Case Report Screen. Note that only State Medical Examiners will see this selection screen.

5. The Medical Examiner Case Form

5.1 An Overview

The *DAWN ME Case* is the main vehicle for capturing medical examiner/coroner (ME/C) DAWN data. The information collected on this form falls into four general categories:

- **Operations Data.** These data items, used in processing and tracking DAWN cases, include *Facility ID* and *Date of Death*.
- **Demographic Data.** These data items, used to investigate differences in drug use patterns across decedent demographic groups, include basic information such as *Sex*, *Age*, *Decedent's Last Residence ZIP Code*, and *Race/Ethnicity*.
- Characteristics of the Case. The information collected in ZIP Code for Place of Death, Factors Supporting DAWN Case Determination, Cause of Death, Manner of Death, and Drug Involvement in Death, provides details on the circumstances of the death.
- **Substance(s) Data.** The data items reported under *Substance(s) Involved* constitute the core of the data reported to DAWN. These items include information about the specific drug(s) or substance(s) used, whether the substance was confirmed by a toxicology report, the route of administration of each reported substance, and whether alcohol was involved and confirmed by toxicology test.

5.2 How to Enter a Case

To enter a new case in the Medical Examiner Case Report, go to the menu in the corner of the screen, and under *Cases*, select *Enter New Cases* (see Figure 5-1).

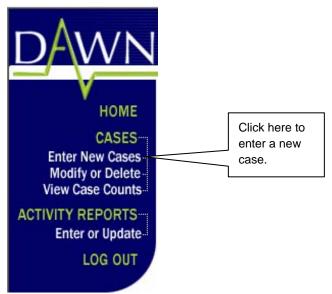


Figure 5-1 Menu in the Corner of the eMERS Screens

There are three ways to enter information in the Medical Examiner Case Report, depending upon the type of field. For some fields, you enter information by clicking in the field and then typing the information. Other fields require you to use either *check boxes* or *radio buttons*.

5.3 How to Use Check Boxes

The fields containing *check boxes* allow you to **select all that apply**. When you click in a check box, a check mark appears (see Figure 5-2).

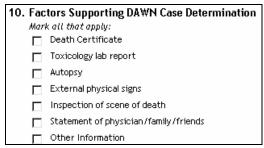


Figure 5.2 Check Boxes

To erase a check mark, click in the box a second time.

5.4 How to Use Radio Buttons

The fields containing *radio buttons* allow you to select **only one option** from among those listed. When you click in a radio button to make a selection, a black dot appears (see Figure 5-3).



Figure 5-3 Radio Buttons

If you click and put a dot in one button and then click and put a dot in a second button, the dot in the first button will automatically disappear, and that choice will no longer be selected.

5.5 How to Complete the Fields

The Medical Examiner Case Report entry fields begin with the number 3 for Date of Death. This is because the electronic data entry screen has been adapted from the paper form. Fields 1 and 2 on the paper form consist of the facility ID and a Cross-reference number. These appear automatically in eMERS and do not require entry fields. For help with reporting guidelines in completing the fields, click on the red question mark on the right of the screen, as highlighted in Figure 5.

As mentioned earlier, the first field that requires entry is number 3, *Date of Death* (see Figure 5-4).

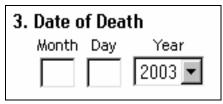


Figure 5-4 Date of Death

Date of Death - Enter the month, day and year of the death. Convert the month, spelled out in text, to numbers.

The year automatically defaults to the current year. In some cases, you can override the default by selecting an earlier year from the drop-down list provided, in those instances where you are reporting cases from the previous year (see Figure 5-4).

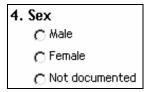


Figure 5-5 Sex

Sex - Indicate the decedent's sex by selecting either the **Male** or **Female** radio button option, or, if the sex is unknown, select **Not documented** (see Figure 5-5).

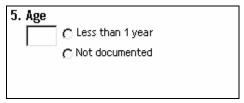


Figure 5-6 Age

Age - Enter the decedent's age. If the age is less than a year, select the corresponding radio button, or if the age is unknown, select the radio button, *Not documented*.

When age information is inconsistent in the decedent's record, determine the age by using the decedent's date of birth. Be careful when entering age; the system will accept any age under 120. For example if you mean to enter 19 years but enter 119 years by mistake, 119 will be accepted. Please verify the age before moving onto the next item.(see Figure 5-6).

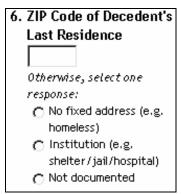


Figure 5-7 Zip Code of Decedent's Last Residence

ZIP Code of Decedent's Last Residence – Enter the five-digit ZIP Code of the decedent's last residence. Or use the appropriate radio button to indicate if the decedent has no fixed address, or was known to be in an institution such as a shelter. If the ZIP code is unknown, then select the radio button, *Not documented* (see Figure 5-7).

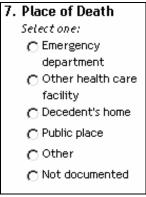


Figure 5-8 Place of Death

Place of Death – Use the appropriate radio button to indicate the decedent's place of death. If the place of death is unknown, then select the radio button, *Not documented* (see Figure 5-8).

Record where the death occurred, as described in the record.

- If the death occurred in an emergency department of a hospital or other health care facility, enter *Emergency department*.
- If the death occurred in a hospital or other health care facility but not in the emergency department, enter *Other health care facility*.
- If the death occurred in the decedent's residence, enter *Decedent's home*.
- If the death occurred in a public place, such as in a store, on the street, or in a park, enter *Public place*.
- If the death occurred somewhere else, such as in a neighbor's house or in the car, enter *Other*.

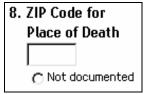


Figure 5-9 Zip Code for Place of Death

ZIP Code for Place of Death - Enter the five-digit ZIP Code of the decedent's place of death. If the ZIP code is unknown, then select the radio button, *Not documented* (see Figure 5-9).

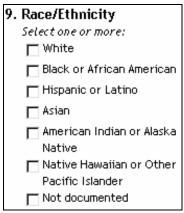


Figure 5-10 Race/Ethnicity

Race/Ethnicity - Race/Ethnicity - Indicate the patient's racial origins by selecting all applicable checkbox options. Multiple categories may apply. For example, if race on the chart is "white" and ethnicity is "Hispanic," check both *White* and *Hispanic or Latino*. If the patient's race/ethnicity is not documented on the chart, or is not one of the categories shown, select *Not documented*. **However, if you select** *Not documented*, **you must not select any other options** (see Figure 5-10).

When coding Race/Ethnicity use the following definitions:

White – A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Black or African American – A person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black" or "African American."

Hispanic or Latino – A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term "Spanish origin" can be used in addition to "Hispanic" or "Latino."

Asian – A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

American Indian or Alaska Native – A person having origins in any of the original peoples of North America and South America (including Central America) and who maintain tribal affiliation or community attachment.

Native Hawaiian or Other Pacific Islander – A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

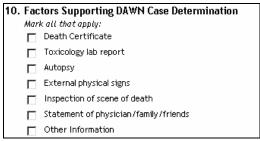


Figure 5-11 Factors Supporting DAWN Case Determination

Factors Supporting DAWN Case Determination – Use the check boxes to indicate <u>all</u> of the factors that support the determination that this is a DAWN Case (see Figure 5-11).

Click in the box next to the category that identifies the death as a DAWN case. The categories are as follows:

- *Death Certificate* A legal public document stating the cause or manner of death, as ruled by the medical examiner or coroner.
- *Toxicology lab report* Used to detect the presence of substances in the decedent's body.

Remember: The detection of substances by toxicology does not qualify the death as a DAWN case without supporting evidence. At least one other factor must also be present to implicate the substance(s) contributing to the death.

- Autopsy Contains the findings from the examination of the decedent to determine the cause or manner of death.
- External physical signs A record may contain findings of external physical signs on the body of the deceased supporting the DAWN case determination.
- *Inspection of scene of death* A record may contain findings from the inspection of the scene of death supporting the DAWN case determination.
- Statement of physician/family/friends The record may contain a statement supporting the DAWN case determination, from a physician, a family member or friend of the decedent.
- Other information Any other information contained in the record supporting the DAWN case determination.

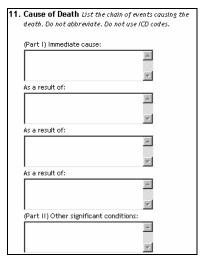


Figure 5-12 Cause of Death

Cause of Death - Type in a **detailed** description of each cause contributing to the death. For example, instead of simply typing *suffocation*, you might instead type *overdose of barbiturates* which led to suffocation (see Figure 5-12).

It should never be missing from a completed record. Do not use abbreviations or ICD-10 Codes. When possible, copy verbatim from the decedent's record (for example, from the death certificate, post mortem, or autopsy report) however be sure to include as many specifics from the record as possible.

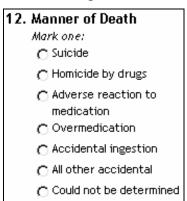


Figure 5-13 Manner of Death

Manner of Death - This item characterizes the death by whether it was inflicted by the decedent (suicide), inflicted by another person (homicide by drugs), or was the result of a physical reaction to a substance consumed. (see Figure 5-13).

Select the manner of death based on the available information in the record. You may need to look in several places in the record to find the manner of death. Do not rely on the statement of family, friends, or medical personnel if that conflicts with the findings of the medical examiner or coroner. Use the Decision Tree in Appendix D for a guide.

The categories are presented in a hierarchy. Select the first category that describes the manner of death and enter that and only that category.

The categories are defined below:

- Suicide This category include cases where the death was ruled a suicide. A suicide that involves hanging, wrist slashing, shooting, jumping, etc. is included **if drugs were involved and documented as a contributing factor.**
- *Homicide by drugs* This category, defined as the taking of another individual's life using drug(s), is used only when the **drug was a direct cause of death**.
 - Homicide by drugs includes death where the decedent was given a drug or other substance to hasten his or her death.
 - Homicide by a means other than drugs **are not** reportable to DAWN. For example, homicide by shooting or stabbing is not a DAWN case, even if the victim was using drugs that contributed to violent behavior.
- Adverse reaction to medication This category includes deaths that are ruled to be accidental
 or natural and the death resulted from an adverse reaction to a prescription, over-the-counter
 medication, or dietary supplement.
- Overmedication This category includes death that are ruled to be accidental or natural and
 the death resulted from the use of more that the recommended dose of a prescription, overthe-counter medication, or dietary supplement.
- Accidental ingestion This category includes deaths that are ruled to be accidental or natural and the death resulted from the decedent taking the drug(s) accidentally or unknowingly. If the decedent knowingly took the drug, but the resulting outcome (death) was accidental, that is **not** accidental ingestion.
- All other accidental This category includes deaths that are ruled to be accidental or natural but cannot be attributed to an adverse reaction to medication, overmedication, or accidental ingestion.
- Could not be determined This category includes any DAWN case for which the manner of death was listed on the death certificate as, Could not be determined.

13. Drug Involvement in Death Mark one: O Drug-induced: drug (s) directly caused the death O Drug-related: drug (s) contributed to the death If drug-related, mark one: O confirmed O presumed

Figure 5-14 Drug Involvement in Death

Drug Involvement in Death - Indicate whether drugs **directly** caused the death (**Drug-induced**) or only **contributed** to the cause of death (**Drug-related**) by clicking in the appropriate radio button (see Figure 5-14).

If a death is *drug-related*, you must indicate whether the role of the drug in the death is *confirmed* or *presumed*.

Enter *confirmed* if the death investigation yielded enough information to determine conclusively that drug use was involved in the death.

Enter *presumed* if drug use is suspected to have contributed to the death, but conclusive evidence was not obtained in the course of the death investigation.

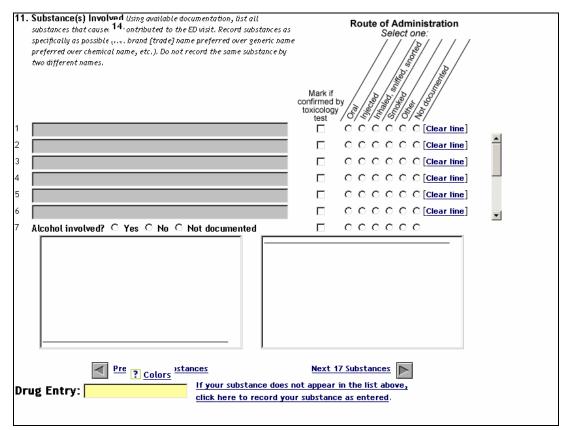


Figure 5-15 Substance(s) Involved

Substance(s) Involved - Indicate the drugs involved in the visit (see Figure 5-15). You may enter up to twelve drugs. If you enter more than six drugs, use the scroll to view any additional drugs (see Figure 5-15a).

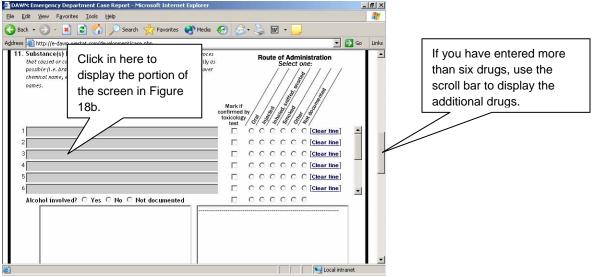


Figure 5-15a Substance(s) Involved Section (Top)

To enter the first drug name, click in a gray line and the screen will automatically jump to display the yellow field in which to enter a substance (see Figure 5-15b).

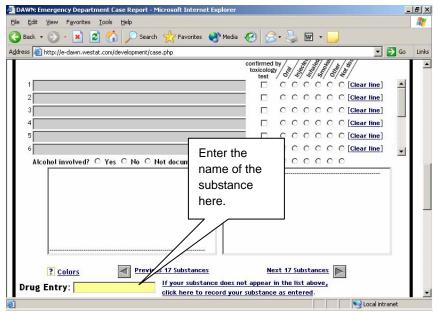


Figure 5-15b Substance(s) Involved Section (Middle)

In the yellow Drug Entry field, enter the name of the substance involved exactly as it appears on the record. A list of drugs appears the boxes above the Drug Entry field.

This list always starts with the drug that matches letter for letter the drug name you typed, or the drug name in the list that is closest alphabetically to what you typed, if the exact drug you typed does not appear on the list.

The drugs displayed in the list always appear in strict alphabetical order. This list appears in the same way regardless of whether you capitalize the first letter of the drug name (see Figure 5-15c).

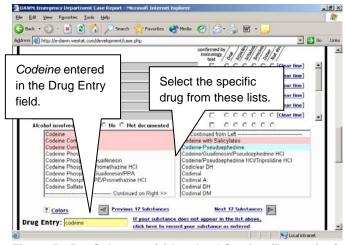


Figure 5-15c Substance(s) Involved Section (Bottom) w/codeine Entered in the Drug Entry Field

Select the specific drug by clicking on it in the list provided. If necessary, use the arrow buttons under the boxes to display additional selections (see Figure 5-15d).

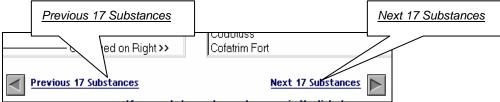


Figure 5-15d Arrow Buttons to View Additional Selections

Since the list is in alphabetical order, the buttons enable you to move backwards or forwards alphabetically.

Once you have selected the specific drug involved from the list provided, this first drug will appear in the field in line 1 of the Substance(s) Involved Section.

For example, if you type *codeine* in the Drug Entry field, and then select Codeine Sulfate from the list, Codeine Sulfate will automatically appear in the gray field in line 1 of the Substance(s) Involved Section (see Figure 5-15e).

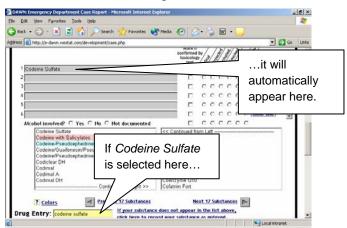


Figure 5-15e Substance(s) Involved Section w/CODEINE SULFATE Selected

Once the drug appears in the gray box in line 1 of the Substance(s) Involved Screen, click in the "confirmed by toxicology test," if the substance has been confirmed by toxicology. If the substance has not been confirmed by toxicology, leave this field blank. Note that brand names cannot be confirmed by toxicology.

Next, click on the radio button corresponding to the route of administration of the substance, for example, *Oral*, *Injected*, etc. (see Figure 5-15f).

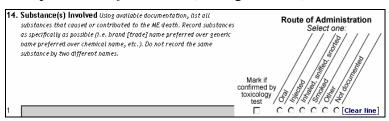


Figure 5-15f Close-up of Box and Radio Buttons

If the drug does not appear in the list, first check the spelling of the drug you entered. If you have spelled the drug correctly and you have used the arrow buttons to review the whole list and your

entry does not appear, click on the blue line that reads, if your drug does not appear in the list above, click here to record your substance as entered (see Figure 5-15g).

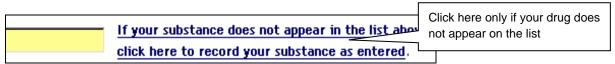


Figure 5-15g If your drug does not appear in the list above...

When you do this, a pop-up window will appear, enabling you to enter any information you might have about this substance (see Figure 5-15h). Enter any additional information in the field provided, then click on the button titled, *Record the Description*.

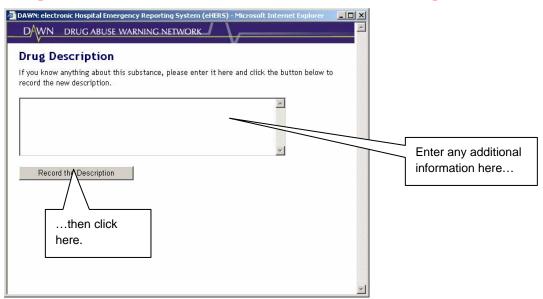


Figure 5-15h Pop-up When Drug Does Not Appear on the List

Since the list of drugs is very extensive, you should be certain that you have read the record and typed the drug name correctly before choosing this option.

When you click on a drug name to select it from the list of drugs, be sure to click only once on the selection. If you click twice on a selection, your selection will erroneously appear in the gray boxes on two lines, and the same drug will mistakenly be reported twice. Should this happen, click on the words *Clear Line* that appear at the end of the line in which the second selection appears (see Figure 5-15i).

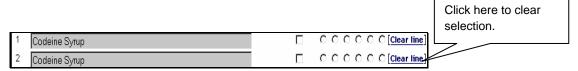


Figure 5-15i Same Drug Accidentally Selected Twice

Note that the above does not apply in cases where the same drug was administered by more than one method (for example *Injected* and *Inhaled*, *sniffed*, *snorted*).

In case where the same drug has been administered by more than one method, the drug must be entered as many times as the ways in which it was administered. For example, if the drug was administered in two different ways, it must be entered twice.

A word about inhalants

If you select an **inhalant** from the list, **the Route of Administration will automatically be set to** *Inhaled*, *sniffed*, *snorted*.

If you change the route to something else, the following message will appear:

You have specified a substance that is listed as 'Inhalant Only' but have selected a route other than 'Inhaled, sniffed, snorted'.

If the route should be 'Inhaled, sniffed, snorted', click the [OK] button.

If you wish to remove this substance from the list, click the [Cancel] button.

To be reported to DAWN, a non-pharmaceutical inhalant must have been *inhaled*, *sniffed*, or *snorted*. A non-pharmaceutical inhalant must also have psychoactive properties (i.e., affect the brain like a drug) when inhaled. Do not report inhalation of non-volatile gases, such as carbon monoxide.

Pharmaceutical inhalants, such as anesthetic gases, are reportable to DAWN. Anesthetic gases include gases such as nitrous oxide.

A **non-pharmaceutical** substance may be reportable to DAWN if it was inhaled, snorted or sniffed.

Is it listed in eMERS? If YES, it is reportable to DAWN.

EXAMPLES

Adhesives: Model airplane glue, household glue, rubber cement.

Aerosols: Spray paint, hairspray, air freshener, deodorant, fabric protector

(Scotchguard).

Solvents: Nail polish remover, paint thinner, correction fluid and thinner, toxic markers,

pure toluene, cigar lighter fluid, gasoline, carburetor cleaner, octane booster.

Cleaning agents: Dry cleaning fluid, spot remover, degreaser.

Food products: Aerosol vegetable cooking spray, aerosol dessert topping (such as whipped

cream, whippets).

Volatile gases: Butane, propane, helium.

Nitrites: Amyl nitrite, butyl nitrite, "poppers," "snappers," "rush," "locker room,"

"bolt," "climax," video head cleaner.

Freons: Freons of any type.

EXCEPTION: Carbon monoxide, although a gas, is NOT reportable to DAWN.

A word about benzodiazepines (benzos, BZD):

The terms *Benzodiazepines*, *benzos*, and *BZD* frequently appear in toxicology results. All refer to the class of drugs known as *benzodiazepines*. To report drugs as specifically as possible, look in other parts of the record for a more specific drug name.

- Good: Report benzodiazepines or benzos, if a generic or brand name is not documented in the record. Select confirmed by toxicology, if the toxicology was positive for benzodiazepines.
- **Better:** Report the generic name, if documented in the record and no brand name is documented. Do not select confirmed by toxicology if the test was only positive for the class, benzos.
- **Best:** Report the brand name, if documented in the record. Brand names are not confirmed by toxicology.

The following are examples of benzodiazepines commonly found in DAWN Cases:

Generic name	Brand name
alprazolam	Xanax
	Xanax XR
	Xanbar
bromazepam	Lexomil
chlordiazepoxide	Librium
clonazepam	Klonopin
diazepam	Valium

Generic name	Brand name
flunitrazepam	Rohypnol
flurazepam	Dalmane
lorazepam	Ativan
midazolam	Versed
oxazepam	Serax
temazepam	Restoril
triazolam	Halcion

A word about opiates:

Opiates frequently appear in toxicology results. Opiates or *opioids* are a class of pain relievers. To report drugs as specifically as possible, look in other parts of the record for a more specific drug name.

- Good: Report opiates, if a generic or brand name is not documented in the record. Select confirmed by toxicology, if the toxicology was positive for opiates.
- **Better:** Report the generic name, if documented in the record and no brand name is documented. Do not select confirmed by toxicology if the test was only positive for the class, opiates.
- **Best:** Report the brand name, if documented in the record. Brand names are not confirmed by toxicology.

The following are examples of opiates commonly found in DAWN cases:

Generic name	Brand name
heroin	
codeine	Tylenol with codeine
acetaminophen-codeine	Tylenol #3
	Tylenol #4
hydrocodone	Hydrocet
acetaminophen-hydrocodone	Lorcet
	Lortab
	Vicodin
hydrocodone-ibuprofen	Vicoprofen
hydromorphone	Dilaudid
morphine	Avinza
	Kadian
	MSContin
	Oramorph SR

A word about street names:

If the record refers to a drug by a street name (for example, *Horse*), a pop-up screen will appear (see Figure 5-15j) containing a standard description of the drug bearing that street name (for example, for the street name *Horse*, a standard description might be *Heroin*).

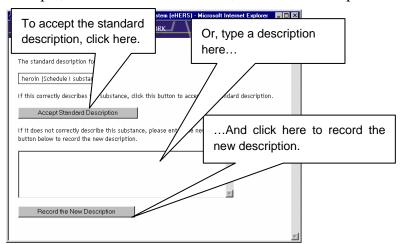


Figure 5-15j Pop-Up Screen with Street Drug Description

You can accept the standard description by clicking on the button titled, "Accept Standard Description." Or, if the street term has a different meaning in your locale, you may type a description for the street name in the box provided, and then click on the button titled, "Record the New Description."

After completing all of the fields on line 1 for the first substance involved in the DAWN case, repeat this process for any additional substances that were involved. You may enter up to six substances.

How to indicate alcohol involvement:

After entering information about every drug involved in the case, indicate whether alcohol was also involved, by selecting the appropriate radio button (see Figure 5-15k).

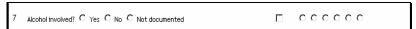


Figure 5-15k Radio Buttons for Alcohol Involvement

If alcohol was involved, indicate whether this has been confirmed by toxicology, and indicate the route of administration. To view the remaining fields, scroll to the bottom of the screen.



Figure 5-16 Field 15: Comments Field

Comments – Type in any additional comments you may have in the field provided (see Figure 5-16). Please provide any information that explains why this is a DAWN case. This is important helpful when it is not obvious from the information entered in *Cause of Death*.

5.6 How to Submit the Form

To submit the form, scroll down to the bottom of the screen.

If you will <u>not</u> need to edit this record later, click on the button titled Save Case as **COMPLETE**. You cannot save a case as **COMPLETE** until you have provided data for all the fields.

If you know that you will need to edit the record later, click on the button titled, *Save Case as INCOMPLETE*. (see Figure 5-17).

You may want to leave a case as *incomplete* for various reasons. It may be that some information may be missing from the record and you want to see if you can get the missing information from other sources in the medical examiner's office. Or, you may have complete information, but may want to confer with someone else to ensure you are interpreting a note correctly, or reading the handwriting in the record correctly.

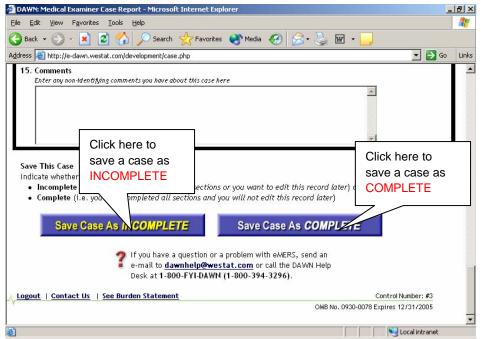


Figure 5-17 Fields at the Bottom of the Screen

Once you select Save Case as Complete and log off the system, you will not be able to delete it.

5.6.1 About Potential Errors Regarding Drug Entries

After you have selected *Save Case as Complete* there are only a few instances in which you may make changes.

One instance pertains to entering the same substance twice under different names. This might occur in the set of fields titled, *Substances Involved*, specifically in the field titled *Drug Entry* (see Figure 5-18).

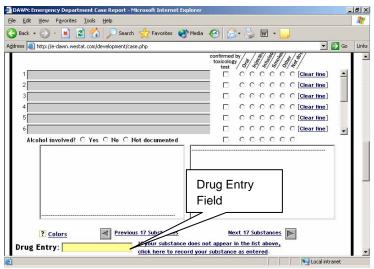


Figure 5-18 Substance(s) Involved Section w/Drug Entry Field

For example, suppose you type *Tylenol* in the Drug Entry field, and indicate that it was administered orally, by clicking in the circle under the word, *Oral* (see Figure 5-19).

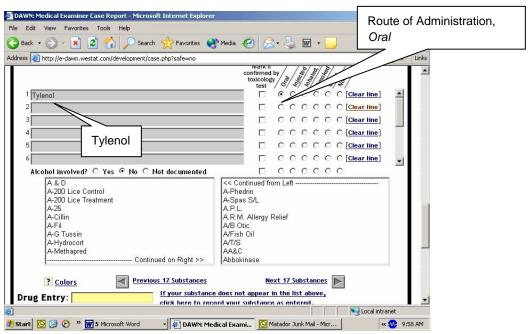


Figure 5-19 Tylenol Selected as the Drug and Oral Selected as the Route of Administration

Then, suppose you return to the Drug Entry field and type, *acetaminophen* (the same drug contained in Tylenol), and again select *Oral* as the Route of Administration (see Figure 5-20).

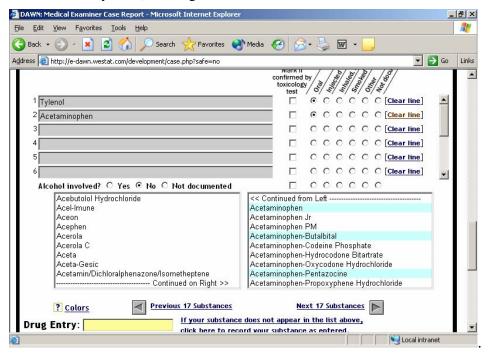


Figure 5-20 Acetaminophen Selected as the Second Drug and Oral Selected Again as the Route of Administration

Because the two drugs in our example are the same, and because they were both administered in the same way, the system will display a screen like the one in Figure 5-21, explaining that this may be a possible duplication and enabling you to delete one of the entries by clicking on a link..

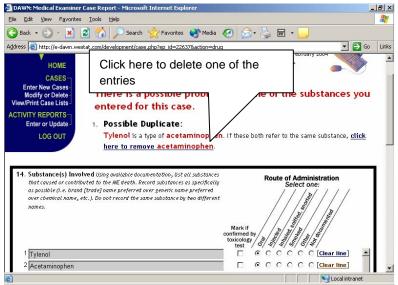


Figure 5-21 Screen Describing Potential Error

Delete the entry if appropriate and then scroll down and click on the button titled, Save Case as Complete.

Another instance in which you may make changes to the case record after you have selected *Save Case as Complete* pertains to selecting a non-specific drug in the *Drug Entry* field. Non-specific drugs appear outlined in pink in the drug lists (see Figure 5-22).

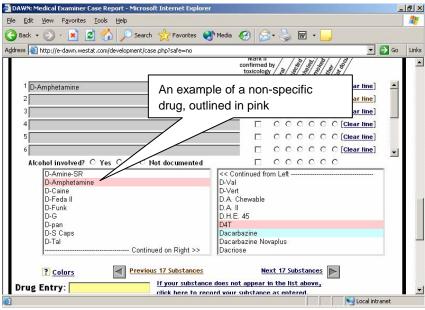


Figure 5-22 Non-specific Drug

Should you select a non-specific drug and click on *Save Case As Complete*, a screen will be displayed, similar to the one in Figure 5-23, alerting you to a possible problem and enabling you to display a list of drugs similar to the non-specific drug you have selected, from which you may, if you choose, select a more specific drug.

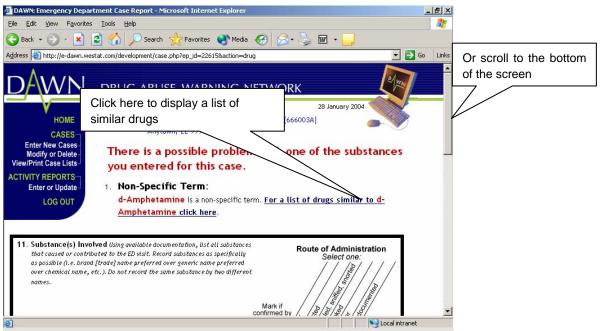


Figure 5-23 Non-specific Drug Possible Problem Screen

Or, if you do not wish to choose a more specific drug, simply scroll down to the bottom of the screen and click again on *Save Case As Complete* (see Figure 5-24).

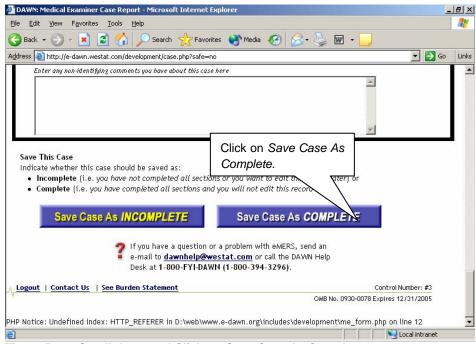


Figure 5-24 Scroll down and Click on Save Case As Complete

Yet another instance in which you may make changes to the case record after you have selected *Save Case as Complete* pertains to selecting either caffeine or nicotine in instances where these substances didn't contribute to the case.

For example, someone who overdosed on Heroin, may have had a cup of coffee beforehand, but the resulting caffeine didn't contribute to the suffocation from the overdose.

In instances in which caffeine or nicotine have been selected, a screen will be displayed similar to the one in Figure 5-25, explaining that this may be a possible problem and enabling you to delete the pertinent entry by clicking on a link.



Figure 5-25 Caffeine (or Nicotine) Relevance Screen

Delete the entry if appropriate and then scroll down and click on the button titled, *Save Case as Complete*.

5.6.2 About Potential Duplicate Case Entries

It sometimes happens that the same case is entered twice by mistake. If you enter a case that closely matches a previously entered case, a screen will be displayed, containing a summary of the case just entered and a summary of previously entered cases that closely resemble the recently entered case (see Figure 5-26a).

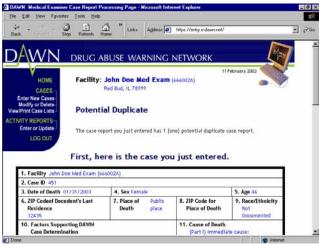


Figure 5-26a Potential Duplicate Screen (Top)

Scroll down to view the potential duplicates (see Figure 5-26b).

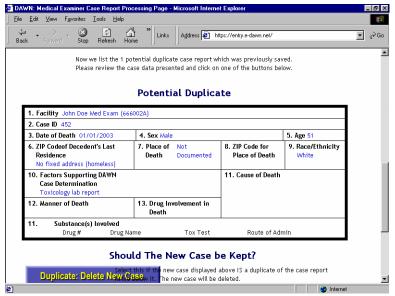


Figure 5-26b Potential Duplicate Screen w/Potential Duplicate Case

After you have reviewed the potential duplicate case or cases:

- If you determine that the newly entered case is a duplicate and you wish to delete it, click on the button titled, "Duplicate: Delete New Case" (see Figure 5-26c). This will return you to a blank Medical Examiner Case Report screen, where you may then enter a new case.
- If the case is not a duplicate, and you wish to keep it, click on the button titled, "Not a Duplicate: Keep New Case." (see Figure 5-26c). This will return you to a blank Medical Examiner Case Report screen, where you may then enter a new case.
- If the case is not a duplicate, but you wish to go back and edit it, click on the button titled, "Not a Duplicate: Edit New Case" (see Figure 5-26c). Unlike the first two options, this will return you to the case that you have entered in the Medical Examiner Case Report screen, where you may then edit the case.



Figure 26c Potential Duplicate Screen (Bottom)

6. How to Modify or Delete an Incomplete Case

To modify or delete an incomplete case, select *Modify or Delete* from the menu in the corner of the screen (see Figure 6-1).

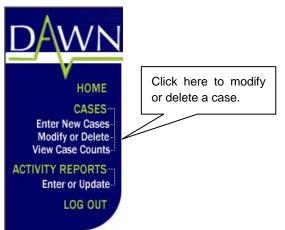


Figure 6-1 Menu in the Corner of eMERS

This will display a table containing a list of cases (see Figure 6-2).

The table includes the following columns:

- Case ID This ID enables the DAWN Help Desk to identify a specific case. It is assigned automatically by eMERS.
- *Status* The status of a case is either *Incomplete*, meaning there are additions or changes yet to be made, or *Complete*, meaning there are no more additions or changes to be made.
- Case Entered On The date on which the case was first entered into the system. All dates are Eastern Time, meaning that if a case was entered after midnight Eastern Time, the date will reflect the following day, regardless of the Time Zone in which the case was entered (for example, if a case was entered in California at 11:05 P.M. on January 22, the date in the table would be January 23, since 11:05 P.M. in California, is 2:05 A.M. of the following day, Eastern Time.).
- Date of Death The date of death. In this case, the date reflects the actual date of the death, as recorded in the ME and entered in eMERS.
- Age The age of the decedent.
- Sex The sex of the decedent.

If the decedent's age or sex has not yet been entered in an incomplete case, the item will be left blank.

Cases are displayed sorted by the date of death, with the oldest case appearing first. To reverse the order in which the cases appear, click on the column head, *Date of Death*.

Click on any of the other column heads to sort the list in ascending order by that specific item (for example, to sort the list in ascending order by the age of the decedent, click on the column head, *Age*). Click a second time on the column head to sort the list in **descending** order.

If the list extends below the screen, click and grab the scroll bar on the right-hand side to view the rest of the list (see Figure 6-2).

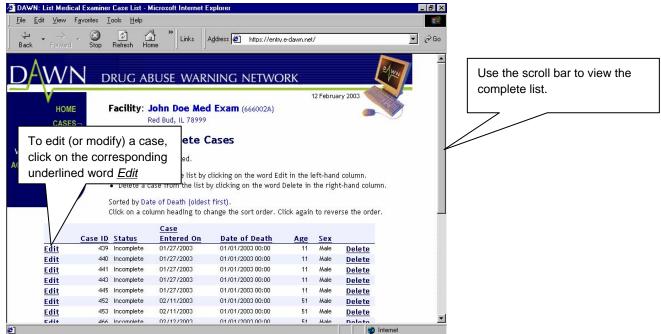


Figure 6-2 Table Containing List of Incomplete Cases

6.1 How to Modify a Case

To edit (or modify) a case, click on the corresponding underlined word, <u>Edit</u> (see Figure 6-2). This will display the Medical Examiner Case Report that is currently saved in eMERS.

Click and grab the scroll bar on the right-hand side to view the additional fields that extend below the screen.

Modify or edit the Medical Examiner Case Report by clicking in the field containing the information you wish to add or change (For instructions on how to enter information in the fields of a Case Report, see the section, titled, "The Medical Examiner Case Report").

After you have finished making the modifications to the Medical Examiner Case Report, follow the same procedures as when you first entered the case record.

If you know that you will not need to edit this record later, save your changes by clicking on the button at the bottom of the screen titled, "Save Case as COMPLETE" (see Figure 6-3).

If you know that you will need to edit the record later, scroll down to the bottom of the screen and save your changes by clicking on the button at the bottom of the screen titled, "Save Case as INCOMPLETE" (see Figure 6-3).

Once you select *Save Case as COMPLETE* and log off the system, you will not be able to make any changes to the case record and you will not be able to delete it.



Figure 6-3 Close-up of Buttons at the Bottom of the Medical Examiner Case Report Screen

6.2 How to Delete a Case

To delete a case:

1. From the table of incomplete cases, click on the underlined word, <u>Delete</u> in the row corresponding to the case you wish to delete (see Figure 6-4).

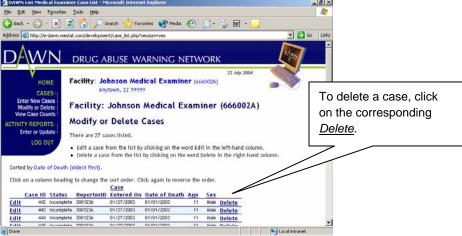


Figure 6-4 Table Containing List of Incomplete Cases

This will display the Delete a Medical Examiner Case screen (see Figure 6-5).

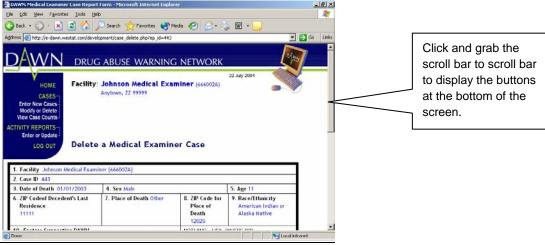


Figure 6-5 Delete a Medical Examiner Case Screen

Review this case record to make sure it is the one you want to delete.

To delete this case, scroll down to the bottom of the screen and click on the button titled, *Delete This Case* (see Figure 6-6).

If you decide you do not want to delete this case record, scroll to the bottom of the screen and click on the button titled, *Do NOT Delete This Case* (see Figure 6-6).

Clicking on either button returns you to the list of cases.

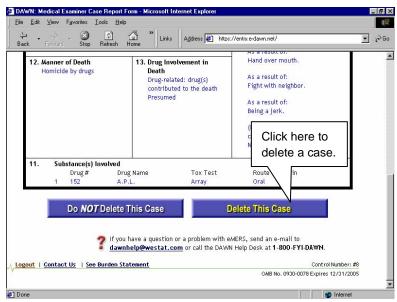


Figure 6-6 Delete a Medical Examiner Case Screen (Bottom Portion)

7. How to View Case Counts

To view the number of cases, select View Case Counts from the menu in the corner of the screen (see Figure 7-1).

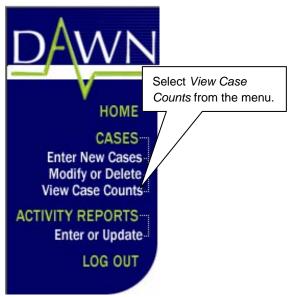


Figure 7-1 Menu in the Corner of eMERS

This will display a screen containing Case Counts the number of complete and incomplete cases and the month and year in which they entered(see Figure 7-2).

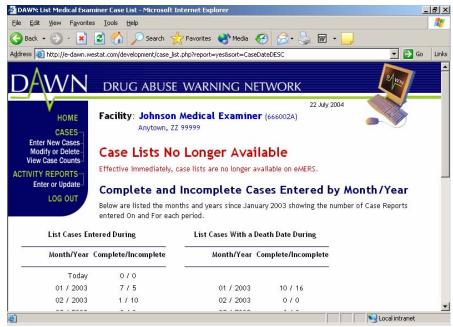


Figure 7-2 View Case Counts Screen

8. How to Enter and Update the Medical Examiner Activity Report

The Medical Examiner Activity Report contains a month-by-month summary of the previously reported number of ME deaths, the previously reported number of records directly reviewed and entry fields where you can add to these previously reported numbers or make the first entries of those numbers for new months. There is also a field where you can make pertinent comments about each number you enter. These comments can help you and the Westat data processing staff understand those entries.

The following section describes how to record the required information in the Medical Examiner Activity Report.

8. 1 How to Display the Activity Report

To display the Activity Report, from the menu in the corner of the screen, under *ACTIVITY REPORTS*, select *Enter or Update* (see Figure 8-1).



Figure 8-1 Menu in the Corner of eMERS

This will display the Medical Examiner Activity Report.

8.2 About the Activity Report Screen

For each month, the Medical Examiner Activity Report contains the total number of previously reported ME deaths, the total number of records that you have directly reviewed and a field for comments, all pertaining to the reporting for a given month. (see Figure 8-2).

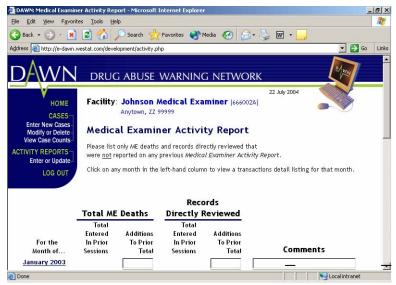


Figure 8-2 Medical Examiner Activity Report

As you receive the information, type in the current total number of ME deaths that occurred in that month on the line corresponding to that month. Then type in the number of records you have directly reviewed, again, on the line corresponding to the month in which the deaths covered by those records occurred. Then type in any comments you might have concerning these totals. If you have zero (0) deaths and zero records to review for a month, enter the zeros in the appropriate boxes and include the comment, "These are true zeros." Without the comment, eMERS won't save the zeros.

The Medical Examiner Activity Report displayed in Figure 54 has no entries for the month of January.

Figure 8-3 shows 153 Total ME deaths typed in under the column heading, *Additions to Prior Total* and 150 Records Directly Reviewed, also, under a column heading that reads, *Additions to the Prior Total*. Since no entries had been made for the month of January, the "prior total" in this case is "zero," which is displayed in this screen as "-."

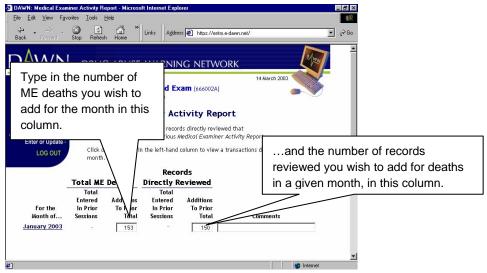


Figure 8-3 Medical Examiner Activity Report w/Entries for January

After you type in the number of deaths that occurred for that month and the number of records that you reviewed for that month, to save your entries, scroll down to the bottom of the screen and click in the box next to the words, "By clicking this box and clicking on the "Save Activity Report" button below, I certify that the above numbers are correct." Then, click on the button titled, "Save Activity Report" (see Figure 8-4) If you enter numbers but do not save your work, the numbers you entered will not be included in the cumulative totals.

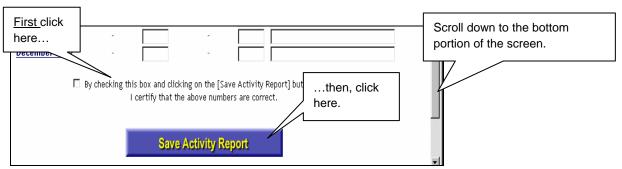


Figure 8-4 Medical Examiner Activity Report (Close-up of Bottom)

Note that if you enter data for a month 12 or more months in the past, you will receive a pop-up screen alerting you to check the date (see Figure 8-5).



Figure 8-5 Pop-up Screen When Data is Entered for a Month 12 or More Months in the Past

This helps to ensure that you have not accidentally entered current data in a field corresponding to an older date. It will not prevent you from entering older data, but simply draws your attention to the fact that you have entered data in a field that corresponds to a month and year at least 12 months in the past.

In the second week of February, you discovered that there were 17 more deaths in January than the 153 deaths that you previously reported. When you add the 17 deaths to the 153 the total becomes 170. You were able to obtain and review the three records that were previously unavailable. You were also able to review all 17 of the records corresponding to the additional 17 deaths. When the three records that were previously unavailable are added to the 17, you would now add that 20, to the 170, for a total of 190. Update the previous totals for January by typing in the additional number of ME deaths that also occurred in January and records that you also reviewed in January (see Figure 8-6).



Figure 8-6 Medical Examiner Activity Report w/Updated Totals

To save your entries and update the totals for the month of January, scroll down to the bottom of the screen and click in the box next to the words, "By clicking this box and clicking on the [Save Activity Report] button below, I certify that the above numbers are correct." Then, click on the button titled, "Save Activity Report"

Once you save your totals, a confirmation screen will be displayed requiring you to review the data you have entered and confirm it (see Figure 8-7).



Figure 8-7 Emergency Department Activity Report Confirmation Screen

Use the scroll bar to review the newly entered totals, appearing in red, for each month corresponding to a given year (see Figure 8-8).

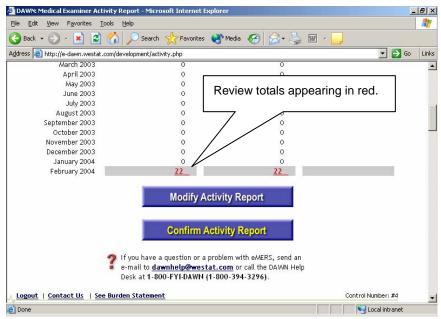


Figure 8-8 Newly Entered Totals Appearing in Red

Note that this page does not display prior amounts in one column and those just entered in another, but rather *total amounts*.

If after reviewing the totals you find that they <u>are correct</u>, click on the button titled, *Confirm Activity Report* to return you to the main eMERS screen.

If the totals are incorrect, click on the button titled, Modify Activity Report, to return to the previous Activity Report Screen and modify the totals as appropriate.

ME deaths and records reviewed that pertain to ME deaths occurring in February, would then be entered for February (see Figure 8-8), and subsequent months in the same manner. In the example in Figure 58, you determined that there were 225 ME deaths in February. But when you report the total number of February deaths, you have not yet had a chance to review any February visit records. Therefore, you have left the *Records Directly Reviewed* column blank for February.

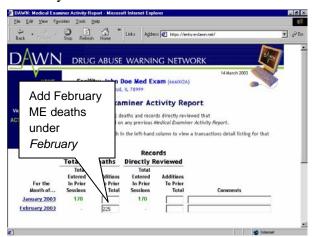


Figure 8-8 Add Deaths That Occurred in February Under February

When you want to add to your totals for a previously entered month, to reflect additional ME visits not previously reported or additional records reviewed, go to the main menu and under "Activity Reports," select "Enter or Update."

The screen will now display the totals you entered previously (see Figure 8-9).

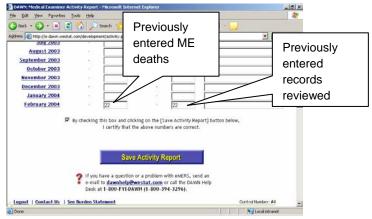


Figure 8-9 Medical Examiner Activity Report w/Previously Entered Totals for January

8.3 How to Review Previously Recorded Activity for a Specific Month

To review the previously recorded activity for a specific month, click on the month. This will display an Activity Reporting History screen for the selected month (see Figure 8-10).

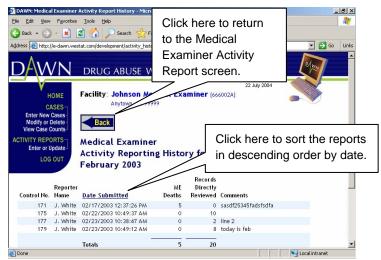


Figure 8-10 Reporting History Screen

Each row on this screen represents the initial or supplemental counts of ME deaths or records reviewed as previously entered into the Activity Report, for ME deaths occurring during the month displayed at the top of the list. This screen contains the following columns:

- The Control No. The reference number used by eMERS and the DAWN Home Office Staff to keep track of each time you add counts of ME deaths or records received;
- The Reporter Name The name of the Reporter who entered the information on the line;
- *The Date Submitted* The date and time on which the reporter submitted the counts on the line;
- *ME deaths* The initial (or supplemental) count of ME deaths entered into the Activity Report on the date submitted;
- Records Directly Reviewed The initial (or supplemental) count of records reviewed by the reporter, as entered into the Activity Report on the date submitted; and
- *Comments* Any comments that the reporter wrote pertaining to the counts entered on the date submitted.

The lines appear in ascending order by date submitted, with the cases submitted at the earliest date appearing first. To reverse the order in which the lines appear, click on the blue underlined words, *Date Submitted* (see Figure 8-10).

The totals of ME deaths and records reviewed appear below the last line. A useful feature of this Activity Report is that you do not have to wait until the end of the month to begin reporting numbers of deaths and records reviewed. If your office can provide visit counts and access to records more often, for example, weekly, and you want to report on a weekly basis, this system allows you to report counts for whatever periods you wish.

The two important points to remember are:

- 1. Enter counts of deaths and records reviewed on the line for the month in which the deaths occurred.
- 2. Be careful not to double-count deaths or records reviewed, when you have multiple entries into the system for the same month.

To return to the Medical Examiner Activity Report screen click on the *Back* button (see Figure 8-10).

9. How to Log Out

To log out of eMERS and return to the Log In screen, select *Log Out* from the menu in the corner of the screen (see Figure 9-1).



Figure 91 Menu in the Corner of eMERS

Appendix A: Common Abbreviations

Abbreviation	Meaning
Δ	change
△MS	change in mental status
\uparrow	increased
\downarrow	decreased
3	male
9	female
(+), +	positive
(-), -	negative
Ø	no, none
1	primary
2	secondary, secondary to
<	less than
>	greater than
ā	before
Α	Asian
AA	African American
A&OX3	Alert and oriented to person, place and time (if x2, oriented to 2 of these 3)
Ab	antibiotic
Abg	arterial blood gasses (blood test)
abn	abnorma
āc	before meals
ad	right ear
ADL ad lib	Activities of daily living (i.ebrushing hair and teeth, bathing, etc.)
AH	as desired, as tolerated auditory hallucinations (hearing voices or sounds)
alc	Alcohol
AMA	Against medical advice
AMS	Altered mental status
AOB	Alcohol on breath
ARD, ARF	Acute respiratory distress, Acute respiratory failure
as	left eye
ASA	Aspirin, (Acetylsalicylic Acid)
au	both eyes
AVH	Audio (sound)-visual (sight) hallucinations
В	Black
BG	Blood glucose (level of sugar in the blood. High-hyperglycemic, Low-hypoglycemic), blood gasses
BIBA	Brought in by ambulance
BCLS	Basic Cardiac Life Support (efforts to resuscitate)
bld	blood
BLS	Basic Life Support (efforts to resuscitate)
BP	Blood Pressure
bpm	beats per minute
Bx	biopsy

c, c	with
C	Cervical - followed by a number it indicates a particular cervical vertebra (of the spine)
Ca	Carcinoma (Cancer)
caps	capsules

ODO	Organists Divid Organ (North Lord Lord)
CBC	Complete Blood Count (blood test)
CC, cc	Chief complaint
CCU	Coronary (Cardiac) Care Unit
CNS	Central Nervous System
CPR	Cardiopulmonary Resuscitation (attempt to revive pt.when the heart or lungs fail)
CVA	Cerebral Vascular Accident (stroke)
DC, D/C	discharge, discontinue
DO, D/O	disorder
DOA	Dead on arrival
DTs	Delerium Tremens (experienced when detoxing from alcohol addiction)
Dx	diagnosis
F00 FK0	Flastus acudia succes (aleast a la saut de de la la
ECG, EKG	Electrocardiogram (checks heart rhythm)
EEG	Electroencephalogram (checks brain waves)
EMS	Emergency Medical Services (ambulance)
EMT	Emergency Medical Technician
Etiol	Etiology (source, origin)
ETOH	Alcohol
FB	foreign body
FH	Family History
F/U	follow up
FUO	fever of unknown (undetermined) origin
Fx	fracture (of a bone)
1 %	
GC	Gonorrhea (sexually transmitted disease)
GI	Gastrointestinal
gtts	drops (liquid)
ĞSW	gunshot wound
H&P	History and Physical
HA	Headache
HBP	High Blood Pressure
HEENT	head, eyes, ears, nose and throat
Нер	Hepatitis
HI	homicidal Ideation (only the thought)
H/O, HO	History of
HPI	History of present illness
HTN	Hypertension (high blood pressure)
Hx	history
ii, i ii	two, three
ICU	Intensive Care Unit
IICP, †ICP	Increased Intracranial Pressure (pressure in the brain)
IM	Intramuscular - injected into the muscle
Imp	Impression (preliminary diagnosis)
Inj	Injection, Injected
IV	Intravenous (injection into the vein)
IVDA, IVDU	Intravenous Drug Abuse, Intravenous Drug Use

(L)	Left, Lumbar - if followed by a number, indicates a particular lumbar vertebra (of the spine)
Lat	Lateral (side)
LBP	Lower Back Pain
LLQ	Left lower quadrant (imagine the body in 4 parts)
LOC	Loss of consciousness, level of consciousness
Lt	Left
LUQ	Left upper quadrant (imagine the body in 4 parts)
LWOBS	Left without being seen
MH	Medical history
MI	Myocardial Infarction (heart attack)
MMTP	Methadone Maintenance Treatment Program
MS	Mental status, Morphine sulfate
MVA, MVC	Motor vehicle accident, Motor vehicle crash
101071, 1010	Motor Vernole decident, motor Vernole order
N&V	Nausea and vomiting
NAD	No apparent distress, No acute distress
NO, N2O	Nitrous Oxide
NL	normal limits
NOS	not otherwise specified
N,V,D	Nausea, vomiting, and diarrhea
OA	On admission
od	right eye
os	left eye
ou	both eyes
OTC	Over the counter (drug which does not need a prescription)
p	after
рс	after meals
PE	physical examination
Peds	Pediatrics
PERLA	Pupils equal and reactive to light and accommodation (normal-test for brain function)
PERRLA	Pupils equal, round and reactive to light and accommodation
PI	Present illness
PINS	Person in need of supervision (a legal petition for intervention)
PMH	Past Medical History
ро	by mouth (per os)
pr	per rectum (inserted into the rectum)
prn	as needed, whenever necessary
PTA	Prior to admission
q	every
QNS	quantity not sufficient
(R) R	right, respirations (breaths)
RLQ	right lower quadrant (imagine the body in 4 parts)
R/O	rule out
R/T	related to
RTC	return to clinic
RUQ	right upper quadrant (imagine the body in 4 parts)
Rx	prescription
1	presemption

Rxn	reaction
S , s	without
S&S	signs and symptoms
SI	suicidal ideation (only the thought)
SL	sublingual, placed under the tongue
SOB	shortness of breath
SQ, SC	subcutaneous - injected into the layer just below the skin ("skin popping")
SR	suture removal (removal of stitches)
ss	1/2
stat	immediately
STD	Sexually transmitted disease
SP, S/P	status-post, after
Sx	symptom
Т	temperature, thoracic - if followed by a number, indicates a particular thoracic vertebra (of the spine)
T&C	Type and crossmatch (blood test to determine blood type and blood product needed)
tabs	tablets
temp	temperature
TIA	Trans-Ischemic Attack (mini-stroke)
TOP	termination of pregnancy (abortion)
TPR	temperature, pulse and respitations
Tx	treatment, therapy, traction
URI	Upper respiratory tract infection (i.ecold, bronchitis)
UTI	Urinary tract infection
VH	Visual hallucinations (seeing things that are not there)
VS	Vital signs (temperature, pulse, blood pressure, respiratory rate)
W	White
Whz	wheeze
wnl	within normal limits
X, \overline{X}	except
Υ	Psychology
yo, Y/O	years old
, o, 170	, 55.5 5.5

FREQUENCY

qd	once daily
qod	every other day
bid	twice per day
tid	three times per day
qid	four times a day
qhs	every night
q2h	every 2 hours
q4h	every 4 hours
qw	every week
qow	every other week

POSITIONS

Anterior/Ventral- front of the body
Posterior/Dorsal- back of the body
Deep- away from the surface
Superficial- on the surface
Inferior- situated below
Superior- situated above
Lateral- pertaining to the side
Medial- pertaining to the middle
Prone- lying face down
Supine- lying face up

SYNONYMS

abdomen-abdomino, celio,laparo bladder-cysto, vesico blood-hemo, hemato, sangui, sanguino breast-mammo, masto breathe--pnea, respiro, respirato, spiro chest-pectoro, stetho, thoraco ear-auro, auriculo, oto eye-oculo,opthalmo, opto fever-febri, pyro, pyreto heart-cardio, corono itching-prurito, psoro kidney-nephro, reno lung-pneumo, pneumono, pulmono mouth-oro, stomato nose-naso, rhino rectum-procto, recto skin-cutaneo, dermo, dermato sound-sono, phono sweat-hidro, sudo swelling- -edema, tumesco tongue-glosso, linguo vein-phlebo, veno

PREFIXES

a- without ad- to ab- away from dys- difficulty

Appendix B: Glossary of DAWN Terms

Glossary of Commonly Used DAWN Terms

Abscess/cellulitis/skin/tissue: In DAWN, skin or tissue problems, such as cellulitis, abscesses, infection, or rashes, mentioned in conjunction with drug or substance abuse.

Accident/Injury: In DAWN, cases involving self-inflicted injuries or injuries resulting from fights, accidents, or assaults with documented use of substances.

Accidental ingestion: In DAWN, a case in which the patient/decedent took the drug accidentally or unknowingly.

Adverse reaction: In DAWN, an allergic or other adverse event or toxicity associated with taking a prescription or over-the-counter drug or dietary supplement according to directions. Includes drug-to-drug interactions and alcohol-drug interactions.

Altered mental status: In DAWN, the chief complaint may refer to any number of abnormal changes in basic mental functioning. The patient or those in attendance state that the patient manifests symptoms of disorientation as to time and place, is delirious, is having hallucinations, is combative, or things of that nature.

Brand name (or Trade name): Drug name that is proprietary and protected by a pharmaceutical manufacturer's registered trademark. Examples include Valium (generic name is diazepam) and Advil (generic name is ibuprofen). The brand is the most specific way to report a drug to DAWN and is preferred over all less specific names.

Case criteria: The specific characteristics that define a DAWN-reportable case. See DAWN Case Identification, Chapter 2 ME Reference Guide.

Charts: ED patients' medical records, which are reviewed by the Reporter to identify DAWN cases.

Chest pain: In DAWN, a category of symptoms associated with pain or discomfort in the chest or upper thorax.

Chief complaint: The symptom(s) or condition(s) for which the patient is seeking treatment in the ED.

Club drugs: During the 1990s, use of certain illicit drugs were linked to "raves" and dance clubs. These substances are commonly referred to as "club drugs." For DAWN, these include Ketamine, flunitrazepam (Rohypnol), gamma hydroxy butyrate (GHB, or its precursor, gamma butyrolactone [GBL]), and methylenedioxymethamphetamine (MDMA or Ecstasy).

Cause of Death: The chain of events – diseases, injuries or complications – that directly caused the death. There can be multiple causes with the immediate cause listed first and any conditions leading to the immediate cause listed sequentially.

Data item: Each of the individual data elements captured by the Reporter on the ED or ME Case Report Form.

DAWN: The Drug Abuse Warning Network, a national public health and substance abuse data collection system. DAWN is the responsibility of the Office of Applied Studies (OAS), a component of Substance Abuse and Mental Health Services Administration (SAMHSA), an agency of the U.S. Department of Health and Human Services.

DAWN Case: An ED visit or ME/C death that was induced by or related to drug use, abuse, or misuse.

DAWN ME Case Form: The electronic form on which the DAWN Reporter records data items that characterize each reportable DAWN Case.

DAWN Reporter: The person responsible for reviewing charts/records, identifying DAWN Cases, recording data items, and submitting them to Westat. This person may be a member of the facility's staff or an Independent Reporter on Westat's staff.

Dependence: A physiological or psychological condition characterized by a compulsion to take a drug on a continuous or periodic basis to experience its effects or to avoid the discomfort of its absence.

Diagnosis/diagnoses: The condition(s) for which the patient was treated as determined by the clinician after study.

Digestive problems: In DAWN, a category of conditions associated with the gastrointestinal system. Examples include indigestion, nausea, vomiting, diarrhea, and constipation.

Direct chart/record review: Procedure used to identify DAWN cases, according to the DAWN data collection protocol. Charts/records reviewed may be paper or electronic. The protocol requires that reporters attempt to obtain and review all charts.

Disposition: The location or facility to which an ED patient was referred, transferred, or released.

Drug category: A grouping of related drugs or substances in the DAWN Drug Reference Vocabulary. Examples of drug categories include major substances of abuse, amphetamines, psychotherapeutic agents, narcotic analgesics, and benzodiazepines.

Drug-induced death: "Drug-induced" means that the decedent's condition was directly caused by the use, misuse, or abuse of a drug(s) or substance(s). Examples of such cases include drug overdoses or adverse reactions to drugs taken as directed.

Drug mention: An instance of a substance being recorded ("mentioned") on a DAWN case report.

Drug Reference Vocabulary (DRV): The comprehensive set of terms and codes used by DAWN to identify and classify drugs and other reportable substances. The DRV is updated monthly and contains thousands of terms for illicit drugs, prescription and over-the-counter medications, dietary supplements, and non-pharmaceutical inhalants. The DRV represents substances by generic, brand, and chemical names, metabolites, and street terms. The DRV is based on the Multum *Lexicon*, Copyright © 2002, Multum Information Services, Inc., which has been modified to meet DAWN's unique requirements (2002).

Drug-related death: "Drug-related" means that the use, misuse or abuse of a drug(s) or substance(s) has contributed to the decedent's death, but did not directly cause it. Examples of such cases include accidents or injuries resulting from drug use.

DRV: See **Drug Reference Vocabulary.**

Drug type: See **Drug Category**.

Facility ID: A seven-character identifier unique to each participating facility. The Facility ID is computer-generated in eHERS/eMERS.

Facility Liaison (FL): The traveling DAWN staff member who is in direct contact with the facility and DAWN Reporters. This Westat employee is responsible for providing face-to-face training, resolving reporting problems, and handling other quality control issues.

Generic name: The name of a drug that is not proprietary and not protected by a trademark. The generic name is often descriptive of the drug's chemical structure. Examples include diazepam (a common brand name is Valium) and ibuprofen (common brand names include Advil and Motrin).

Home Office: The DAWN Operations Center headquarters in Rockville, MD. Regional Monitors and other staff based at the home office are responsible for monitoring and processing data submissions and maintaining quality control.

Inhalants: Inhalants include anesthetic gases and certain nonpharmaceuticals that are inhaled. Anesthetic gases (for example, nitrous oxide, ether, chloroform) are presumed to have been inhaled because they are gases or are delivered as gases. To be classified as an inhalant, a nonpharmaceutical substance must have a psychoactive effect when inhaled, sniffed, or snorted. Psychoactive nonpharmaceuticals fall into one of 3 categories: (1) <u>volatile solvents</u>, which include adhesives (model airplane glue, rubber cement, household glue), aerosols (spray paint,

hairspray, air freshener, deodorant, fabric protector), solvents and gases (nail polish remover, paint thinner, correction fluid and thinner, toxic markers, pure toluene, cigar lighter fluid, gasoline, carburetor cleaner, octane booster), cleaning agents (dry cleaning fluid, spot remover, degreaser), food products (vegetable cooking spray, dessert topping spray such as whipped cream, whippets), and gases (butane, propane, helium); (2) <u>nitrites</u>, which include amyl nitrites ("poppers," "snappers") and butyl nitrites ("rush," "locker room," "bolt," "climax," "video head cleaner"); or (3) chlorofluorohydrocarbons (freons).

Intoxication: The condition produced by the toxic effect of a drug(s), often alcohol.

Malicious poisoning: In DAWN, deliberate poisoning with drugs by another person. Includes drug-facilitated assault, drug rape, and product tampering. Also known as **Homicide by drugs.**

Manner of death: The description of the circumstances surrounding the death. Deaths are classified by manner as *natural*, *accident*, *suicide*, *homicide*, *undetermined and pending*. In DAWN we go a step further with the classifications *natural* and *accident*. We ask reporters to further classify these deaths into the DAWN categories of *Adverse reaction to medication*, *Overmedication*, *Accidental ingestion*, and the "catch-all" category of *All other accidental*.

Nonpharmaceutical inhalant. See Inhalants.

Nonreportable case: A medical death that is not reportable to DAWN because it does not satisfy the DAWN case criteria; that is, the decedent's condition was not induced or related to drug use, abuse, or misuse.

Not documented: A category indicating that the documentation in the record/chart did not contain a response for the data item. "Unknown."

Other significant conditions: Conditions that contributed to the death, but not resulting in the underlying cause listed in the cause of death.

Overdose: In DAWN, a condition associated with consumption of an excessive or toxic quantity of a drug or other substance.

Overmedication: In DAWN, a case in which the decedent took more than the recommended dose of a prescription or over-the-counter drug or dietary supplement. Includes taking extra dose(s) to make up for a missed dose, from forgetting they had taken a dose, or to treat symptoms that did not subside with the recommended dose.

Psychiatric condition: In DAWN, a general term used to denote mental illness or psychological dysfunction, specifically those mental, emotional, or behavioral problems that include suicidal ideation, depression, schizophrenia, bipolar disorder, and so forth.

Records: The decedent's records are reviewed by a Reporter to identify CAWN cases.

Reportable case: A DAWN Case. An death that was induced or related to drug use.

Respiratory problems: In DAWN, a category of conditions associated with breathing. Examples include shortness of breath, coughing, and wheezing.

Route of administration: The manner by which the drug was introduced into the decedents body. Includes oral (swallowed, by mouth); injected (administered by needle, by intramuscular or intravenous injection); inhaled, sniffed, snorted (aspirated, taken into the respiratory system by nose or mouth); or smoked (taken into the respiratory system as smoke from a burning substance).

Sample/Statistical sample: A subset of facilities selected scientifically to represent a larger universe of facilities. Data from the sample is used to extrapolate to the larger universe.

Seeking detox: In DAWN, an ED patient that is seeking a referral to substance abuse treatment, detoxification ("detox"), "rehab", or medical clearance for help with a drug problem.

Seizures: Neurologic events associated with abnormal electrical activity in the brain and manifesting clinically as a change in consciousness, motor, sensory, or behavioral symptoms. "Convulsion."

Street term/slang: Informal, unconventional, or slang name for a drug, usually an illegal drug. Examples include Angel Dust (PCP), Weed (marijuana), Crank (amphetamine/methamphetamine), Speed (amphetamine/methamphetamine), Acid (LSD), Ecstasy (MDMA), Horse or Smack (heroin), Roofies (Rohypnol), and Crack (cocaine). Street terms are documented in the DAWN Drug Reference Vocabulary. Street terms or slang names for drugs may vary across geographic locations or time. New terms are added to the DAWN Drug Reference Vocabulary as they become known.

Substance Abuse and Mental Health Services Administration (SAMHSA): SAMHSA is an agency of the U.S. Department of Health and Human Services (DHHS). SAMHSA is required by law to collect data on drug-related emergency department visits and drug-related deaths investigated by medical examiners and coroners.

Westat: A private research firm based in Rockville, MD. Under contract with SAMHSA, Westat is responsible for the operation of the DAWN data collection system and Operations Center.

Withdrawal: The physical state/symptoms produced by abstention from drugs to which a person is addicted.

Appendix C: Non-Pharmaceutical Inhalants

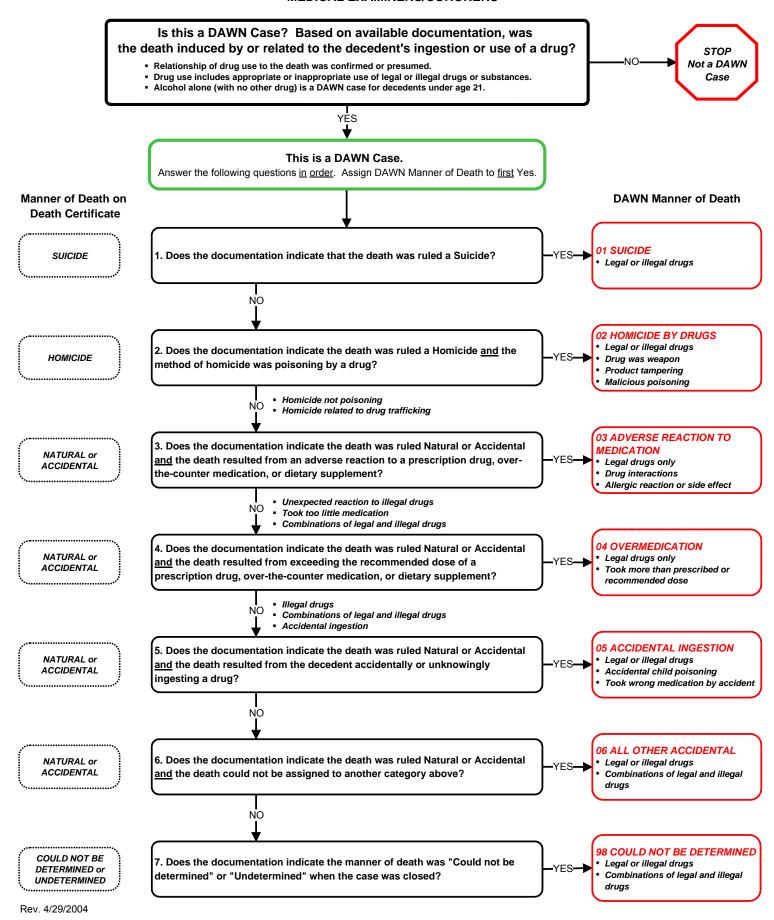
TYPE	BRAND	DRUG
chloro-fluoro-	Chlorinated	
hydrocarbons	Hydrocarbons	chlorinated hydrocarbons
	Dichlorodifluoromethane	dichlorofluromethane
	Freon 11	trichlorofluromethane
	Freon Propellant	freon propellant
	Silicone Spray	trichlorotrifluoroethane
	W-D-40 Lubricant Spray	trichlorotrifluoroethane
nitrites	Black Jack	isobutyl nitrite
	Butyl Nitrite	isobutyl nitrite
	Isobutyl Nitrite	isobutyl nitrite
	Locker Room	isobutyl nitrite
	Poppers	isobutyl nitrite
	Rush	isobutyl nitrite
volatile agent	Acetone	acetone
	Acrylics	paint/unknown composition
	Aerosol Spray	aerosol spray-NOS
	Air Deodorizer	dichlorobenzene
	Airplane Glue	toluene
	Brake Fluid	butyl alcohol
	Bug Off	pesticide/unknown composition
	Butane	butane
	Car Cleaner	cleaner/unknown composition
	Carbon tetrachloride	carbon tetrachloride
	Carburetor Cleaning Fuel	petroleum hydrocarbons
	Chlorothene	chlorothene
	Cleaner Solvent	volatile/unknown components
	Cleaning Fluid	petroleum hydrocarbons
	Coffee Stain Remover	isopropyl ether
	Cologne Aerosol	ethanol-NP
	Contact Cement	toluene
	Correction Fluid	trichloroethane
	Crazy Glue	cyanoacrylate
	Deodorant Aerosol	cosmetic/unknown composition
	Embalming Fluid	formaldehyde
	Epoxy Glue	toluene
	Ether Charl	ethyl ether
	Ethylene Glycol	ethylene glycol
	Facial Astringent	cosmetic/unknown composition
	Fingernail Polish	acetone
	Fluorine Furniture Polish Aerosol	fluorine mineral seal oil
	Gas	petroleum hydrocarbons
	Gasoline	petroleum hydrocarbons
	Glue Gum Out	toluene
	Gum Out	petroleum hydrocarbons
	Hair Spray Aerosol	cosmetic/unknown composition

TYPE	BRAND	DRUG
volatile agent	Helium	helium
J	Hydrocarbon	hydrocarbon
	Inhalants	volatile/unknown components
	Ink	toluene
	Kerosene Oil	petroleum hydrocarbons
	Krylon	paint/unknown composition
	Lacquer	butyl acetate
	Lacquer Thinner	toluene
	Leather Cleaner	cleaner/unknown composition
	Lighter Fluid	petroleum hydrocarbons
	Liquid Paper	trichloroethane/trichloroethylene
	Liquid Wrench	volatile/unknown components
	Lysol	phenolic disinfectants
	Lysol Spray	cresol
	Magic Marker	volatile/unknown components
	Malathion	malathion .
	Methane	methane
	Methanol	methanol
	Methylbenzene	toluene
	Methylchloroform	trichloroethane
	Methylene Chloride	methylene chloride
	Moth Balls	naphthalene
	Motor Oil	petroleum hydrocarbons
	Nail Polish Remover	acetone
	Natural Gas	methane
	Octane Booster	ethanol-NP
	Paint	paint/unknown composition
	D : (T) :	petroleum
	Paint Thinner	hydrocarbons/trichloroethane
	Petroleum Distillate	petroleum hydrocarbons
	Pine Sol	alpha terpineol
	Polish Remover	volatile/unknown components
	Polyurethane	Toluene
	Propane Gas Raid	Propane
	Renuzit	petroleum hydrocarbons aerosol air freshener
	Roach Poison	Propoxur
	Rubber Cement	Toluene
	Shoe Polish	dichlorobenzene
	Silicone Shoe Saver	Silicon
	Solvents	volatile/unknown components
	Spot Remover	trichloroethane/trichloroethylene
	Starting Fluid	ethyl ether
	STP Gas	petroleum hydrocarbons
	Super Glue	cyanoacrylate
	Tape Recorder Cleaner	methylcyclopentane
	Tolly	Toluene
	•	

TYPE	BRAND	DRUG
volatile agent	Toluene Toluene Glue	toluene toluene
	Toluol	toluene
	Transmission Go	petroleum hydrocarbons
	Trichloroethane	trichloroethane
	Tuilio	toluene
	Tuleeo	toluene
	Turpentine	turpentine
	Vaporizers	volatile/unknown components
	Wizard Air Freshener	aerosol air freshener
	Xylene	xylene

Appendix D: Decision Tree

DAWN Decision Tree MEDICAL EXAMINERS/CORONERS



Deaths NOT Reportable to DAWN

- 1) The decedent was a recent drug user, but died of natural causes If the drug did not cause or contribute to the death, it is not a DAWN case.
 - The decedent was a cocaine user who died of cancer.
- 2) The decedent was a homicide victim who was on drugs at the time of his or her death Homicides by any means other than drug(s) are not DAWN cases, even if the victim was using drugs that contributed to violent behavior.
 - The decedent was fatally stabbed while high on PCP.
- 3) <u>A non-pharmaceutical substance was consumed but not inhaled</u> The non-pharmaceutical substance (e.g., gasoline, toluene, paint, glue) was consumed by some means other than inhalation. Non-pharmaceuticals are reportable only if inhaled (e.g., inhaling paint fumes while painting a closet).
 - The decedent drank turpentine. This is **NOT** a DAWN case.
 - The decedent injected gasoline while high on PCP. This is a DAWN case, but <u>only the PCP</u> is reportable.
- 4) Only a history of drug abuse is documented If the documentation points only to a history of drug use/abuse and there is no evidence of recent use, it is **NOT** a DAWN case.
 - A death due to HIV indicates a history of intravenous drug abuse (IVDA). If there is no evidence of recent drug use, this is not a DAWN case.
- 5) <u>Alcohol is the only substance involved and the decedent is age 21 or over</u> Cases involving alcohol and no other substance are reportable only if the decedent is not an adult (age less than 21). Alcohol is reportable in an adult DAWN case only when present in combination with another reportable substance.
- The only documentation of drug use is in toxicology test results.—Documentation of drug use must be present in the record, on the death certificate, or autopsy findings. Toxicology may pick up recent medications taken for legitimate therapeutic purposes, drugs administered during life-saving treatment, or drugs taken some time ago and unrelated to the death. Therefore, toxicology alone is not sufficient evidence to make a death a DAWN case. For example:
 - A man slipped on a wet concrete floor and fractured his hip. He subsequently died from a pulmonary
 embolus. The toxicology result is positive for opiates. There is no other evidence of opiate use. This is
 NOT a DAWN case.
- 7) <u>Drugs listed are not related to the death</u> There is no documentation in the record, death certificate, or autopsy findings to indicate that the death was related to the use of drugs, either legal or illicit. Medications taken for therapeutic purposes that are not related to the death are NOT reportable to DAWN. For example:
 - A 24 year-old female passenger in a bus accident died as a result of her injuries. She is a daily cocaine user, but there is no indication her cocaine use was connected to the injury. This is **NOT** a DAWN case.
 - A young man presented with fever, headache, and symptoms of meningitis. He later dies. The record indicates that he used an albuterol inhaler and took oral steroids for asthma. These medications are not related to the person's death. This is not a DAWN case.
- 8) There is no evidence of drug use The record, death certificate, or autopsy does not refer to any drug use. Examples may include:
 - Undermedication Decedent who forgot to take, stopped taking, or took too little of a prescribed medication. For example, the decedent stopped taking medication to control high blood pressure, suffered a stroke, and died. The stroke is related to not taking the medication. This is **NOT** a DAWN case.